THE

Medical and Physical Journal.

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To the Editors of the Medical and Physical Journal.

GENTLEMEN,

AS the public attention is just now attracted towards a Plan for the establishment of receiving Houses for sick and convalescent Poor in the Metropolis, it is but an act of justice due to the Public, as well as to the original Projectors of a similar plan, that it should be also made known, in order that powerfully benevolent men should avail themselves of whatever good may be contained in the unpublished scheme alluded to.

In the spring of 1798, the following project for instituting a Convalescent Asylum, under the auspices of the Governors of the three Hospitals of Westminster, St. George's, and the Middlesex, was laid before a few of my particular friends,* by whose co-operation many of the details for conducting the Institution were drawn up, and the whole affair seemed ripe for promulgation, when the consideration of the peculiar situation of the country, and the financial limitations imposed even upon the opulent, deterred us from making any further attempt. In addition to this, another very powerful obstacle arose, which effectually checked me, as the original projector, in my future proceedings; and this was, the sure prospect of all that train of opposition, jealousy, and calumny which seem to be unavoidably the lot of those who are likely to gain honor and fame by even doing good. Your publication, as a vehicle for whatever temporary matter influences the profession or science of medicine, may probably not prove an improper channel for communicating the Outlines of this Scheme, more especially as (if worth attention) it will apply to the Hospitals in other parts of the metropolis, as well as to those in all large towns.

* Doctor Bradley; Mr. Saxon, architect; G. C. Bedford, Esq. John May, Esq. and Mr. Robert Southey.

The conſiderations which led to the notion of projecting a plan for eſtabliſhing an Aſylum for the Convaleſcents of the great public Hoſpitals in London, were derived from facts which had fallen under my own obſervation. I had often traced the paths of individual paupers, diſcharged from Hoſpitals in a convaleſcent ſtate, (for it may be obſerved that few patients leave an hoſpital in perfect health) and had generally found them ſinking under the accumulated impediments of immediate poverty, loſs of their former occupation, and want of all the means to ſupport and comfort a debilitated frame. From theſe cauſes they either returned to the Hoſpital, or, deſpairing of effectual relief, ſunk under their diſtreſſes, or were thrown upon the pariſh work-houſe. Many ſuch caſes occurred to my own knowledge; and it ſeemed highly probable that the Subſcribers to Hoſpitals for relieving ſick and lame poor, would gladly ſupport any inſtitution for the more effectually completing their benevolent wiſhes. The numerous wants which attend a poor man diſcharged in a ſtate of returning health from a Hoſpital, preſented themſelves as almoſt inſurmountable difficulties; moſt of theſe, however, were in theory overcome. To return to his empty garret badly cloathed, pennyleſs, and uncertain of that employment which his mean ſtate hardly enables him to perform, is a proſpect which cannot be borne with cheerfulneſs; and hence the almoſt univerſal deſire among the poor to remain in a public Hoſpital after they are cured of their bodily complaints. In thoſe caſes where a family depends on the labour of a parent, the ſcene is ſtill more diſtreſſing; and where children are returned half ſick to their parents, they ſeldom meet with the needful means of recovery.

The bad air of the metropolis alone ſeemed a ſufficient objection againſt convaleſcent eſtabliſhments within the town; neither could any ſort of healthy exerciſe be expected from ſimple manufacturing labour to be performed within doors. The idea of a public kitchen and fruit garden, ſituated within a mile or two of London, embraced every deſirable quality; and as a conſiderable profit would accrue from the ſale of the produce of an extenſive garden of this deſcription, it appeared above all others the moſt eligible for our purpoſe. The plan then grew up, and the neceſſary enquiries were made. The number of acres to be cultivated by the number of convaleſcents, with the ſeveral occupations of each deſcription of the lame or infirm, were laid down; the expences of building and encloſing, the plan of which was admirably drawn out by Mr. Saxon; the total expence of maſter and miſtreſs, ſervants, two horſes, market waggon, &c.; rent of land, diet of convaleſcents, were eſtimated to leave a fair recompence in money for each

each convalescent when discharged from this asylum. The particulars of this project were given by Mr. May to the Society for bettering the Condition of the Poor, about the time of its first origin; and I think it was delivered by myself to Count Rumford, who approved of several parts, proposed some amendments, and queries. Here the business has rested; but if any of your Readers wish for the whole particulars, drawings, &c. I will gladly deliver them over to him, together with any other information I may possess on this subject.

I am, your's, &c.

Soho Square,
March 21, 1801.

ANTHONY CARLISLE.

Observations on Pulmonary Consumption, and on the Utility of the Climate of Madeira for Pthisical Patients, addressed to a Physician in London. By Jos. Adams, M. D.

My dear Sir,

Before my departure from England I had collected notes on many subjects, which I conceived my leisure in this island would have enabled me to arrange. I need not tell you what I have compleated since my arrival; if it seems little for five year's residence, recollect that, healthy as this spot is, it has furnished me with some papers. At all events, you of all others should be the last to accuse me of indolence, since no man in the world is less disposed than yourself to appear unprepared before the public. It is much to be wished that the author to whom you refer me, before he had made up his book on Consumption, had made closer enquiries into what he only seems to hint, namely, the varieties of the disease. Perhaps, when this is accurately accomplished, instead of wondering that Consumption is found in most parts of the world, we shall find even the climate of Great Britain a remedy for some species of that disease. Not, I will admit, where ulceration has taken place, because a more equal temperature must be necessary, that the constitution may be as little as possible interrupted in repairing the mischief. We have now too many proofs of the resources of Nature, to doubt her powers in healing ulcerated lungs. This, however, can only be under certain circumstances; for if so important an organ has suffered to such a degree

gree as to prevent the neceſſary functions of life, the means of reſtoration are cut off, and the caſe muſt end fatally.

That what is called Phthiſis Pulmonalis is known all over the world cannot be doubted; but the true Engliſh Conſumption is, I believe, peculiar to cold, and chiefly to be dreaded in uncertain climates. It is worth while to mark the etymology of different countries. The Greeks gave the name φθισις, from the idea of corruption. Hippocrates, and his ſucceſſors, found in the lungs of ſome phthiſical ſubjects large collections of matter, which, as ſoon as the ſac had any communication with the air, became putrid. Hence they conſidered the diſeaſe a *corruption* of the lungs, and fancied that putrid matter from the liver and other parts, being transferred to that organ, might produce an incurable diſeaſe. We find Celſus, with his uſual accuracy, making a diſtinction between φθισις and *tabes*, conſidering the former as only one ſpecies of the latter.

But that ſpecies of conſumption from which originated the term phthiſis, is uſually the effect of pleuriſy, and is very different from another with which it is confounded, and which gave riſe to the idea that the expectoration of purulent matter was neceſſarily fatal. This laſt diſeaſe has its origin in the ramifications of the bronchia. It begins with cough and expectoration of mucus. If theſe continue for any time in a young ſubject, there is always an apprehenſion leſt the diſeaſe ſhould be confirmed; that is, leſt by frequent returns of inflammation the ſecretion ſhould become habitual. This danger is very much increaſed if the patient contracts the habit of ſtraining himſelf into a cough, in order to diſcharge a ſmall remaining quantity of mucus which he conceives will continue to irritate as long as it remains in the trachea, but which is in fact only ſecreted by the parts to protect them from the patient's efforts, conſequently in proportion to his diligence is the ſecretion increaſed. I have often been aſtoniſhed how little attention phyſicians have paid in not admoniſhing their patients to ſuppreſs their cough as much as poſſible. In all diſeaſed lungs this ſhould be attended to, but more particularly in the laſt mentioned; for by this conſtant irritation on a ſecreting ſurface, ulceration is at laſt produced, which, when we conſider the ramifications of the bronchia, may ſoon be ſo extenſive as to prove fatal. The only writer I find in my notes who deſcribes this ſpecies of conſumption is Chalmers, in his "Diſeaſes of Carolina;" it however exiſts, I believe, in moſt parts of the world, but principally where the ſeaſons are uncertain, and the inhabitants moſt ſubject to coughs.

A third cauſe of conſumption is not only found in every part of the world, but is much more common than is ſuſpected. This

This is the only one that begins with that ſhort dry cough which many writers have conſidered as the firſt ſymptom of conſumptions in general. This diſeaſe is a chronic inflammation, or frequent habitual, though ſlight, inflammations of the lungs, which by repeated effuſion of coagulable lymph, produces adheſions of the cellular part of the lungs, and thus obliterates their cavity, or prevents their expanſion. The appearance in the dead ſubject is extremely well deſcribed by Dr. Baillie.* Mr. Abernethy, by his frequent examination of the bodies of thoſe who died phthiſical, detected it ſo often as to induce him to conſider it one of the moſt common cauſes of conſumptions.† This is, I believe, the only ſpecies of the diſeaſe known in this iſland, if we except thoſe from hæmorrhage and pleuriſy, both which are very uncommon.

Though all theſe are very diſtinct in their origin and progreſs, yet in the moſt advanced ſtages they have many ſymptoms in common; indeed, excepting the purulent expectoration, which never occurs in the conſolidated ſtate of the lungs from the adheſive inflammation, the cloſing ſymptoms of each are nearly ſimilar.

But you are growing impatient to hear of Madeira. True it is, my dear Sir, we are apt to be *ſemper ad eventum feſtinantes et in medias res*; and if I were writing only to you, the latter ought to be paſſed over *haud ſecus ac notas*; but you inſiſt on my writing to the world; if ſo, I muſt diſcriminate what I mean by a diſeaſe before I propoſe a remedy.

Mr. Abernethy, in the paſſage before alluded to, gives many judicious directions, by which the conſumption from conſolidated or infarcted lungs, if you will admit ſo antiquated an expreſſion, may be diſcovered at an early period. Whenever we find the ſhort dry cough with emaciation, it ſhould always be ſuſpected; and his teſt ſeems ſufficient to diſtinguiſh the diſeaſe from all others, excepting the early ſtage of numerous ſmall tubercles. To diſtinguiſh theſe two complaints we ſhould, in the latter, look for other ſigns of ſcrophula; but in the former, there is a peculiarity in the caſt and character of features which is very ſtriking. Inſtead of that ſenſibility which enlivens the ſcrophulous countenance, and that ſanguine diſpoſition which ſees, even in the moſt unfavourable ſymptoms, a proſpect of amendment, we find a ſtiffneſs in all the motions of the features, and of the whole body, which is always in a very erect poſture. The patient frequently anticipates his doom

* Morbid Anatomy, Chapter of the Lungs.
† Surgical and Phyſiological Eſſays, Part I. p. 155.

doom with a languor and complacency, if poffible, more affecting than the unfounded hopes of the other victim. When we are fatisfied that this is the difeafe, we may, I think, without change of climate, always infure fuccefs, at leaft as long as the appetite for food continues. Exercife, by which the blood is more determined to the limbs, and occafional evacuations to anticipate that plethora which may have become almoft periodically habitual, will feldom fail of fuccefs in any climate. But your patience muft be by this time exhaufted; I fhall, therefore, bring you to Madeira.

In all cafes of tubercular or fcrophulous confumption, if, as you exprefs it, the patient does not faunter away his time after you have advifed him to leave England, we can with certainty promife a cure.—Where the lungs are ulcerated from other caufes, it remains for you to determine whether there are powers remaining in the conftitution to effect a cure, if the patient is placed in the moft favourable circumftances; for though we fee many recover from a fituation which invariably proves fatal during the winter in England, yet we have alfo inftances in which an emaciated carcafe has been furrendered to the waves during the voyage, or arrived only early enough to be decently interred. In an earlier period of the difeafe there can be no fituation in the world fo well calculated for the reftoration of difeafed lungs as the ifland of Madeira.

The valley of Tunchall is defended by immenfe hills from every wind but the fouth, where it is open to the fea breeze; this preferves a temperature fo even, as is unknown in any other part of the world. Our winters may be compared to your fummers in every thing but the length of days, and thofe fudden changes from heat to cold to which you are fubject. The thermometer with us is often fteady within doors, or varies fcarcely a degree for weeks together. During winter, its whole range is from 58 to 65; and in fummer, from 70 to 75, rarely amounting to 80, the heat being always tempered by a breeze in proportion to the force of the fun. The drynefs of our atmofphere is not lefs remarkable; this is, I believe, of lefs confequence in confumptive cafes than in thofe which are called humoral afthma, a difeafe unknown in this country. For want of good hygrometers, we have hitherto only been able to judge by the abfence of fogs, by the rapidity of our rivers, which have refufed a nidus to all frefh water fifh excepting fuch eels as can fecure themfelves under large ftones, and by our fecurity from mufquitoes and moft other gnats; frogs, toads, and leeches are equally unknown. Since my arrival, I have not feen or heard of a cafe of intermittent fever; and the few dyfenteries produced by the autumn, are milder and more eafily

relieved

relieved than those in England. However, to decide the question beyond a doubt, I procured two of Mr. Lane's hygrometers: One of these was suspended in open Veranda exposed to the beach, and the other at the residence of the Hon. Augustus Phipps, less than a mile out of town, and in a situation generally reputed damp for this country. By Mr. Phipps's register, which you will receive with this, it appears that the finger rarely pointed higher than two, and was most commonly lower for more than a month of our rainy season. The other hygrometer was so perpetually at, or near °, that the gentleman who had the charge of it, grew tired of marking its trifling variations.

This discussion appears to me of no further consequence, than as far as truth is concerned, till it is found that a dry air is necessary for those who feel a temporary relief from enhaling hydrogen gas, the steam of water, and other analogous substances. The fact is much more to the purpose, that in all cases of scrophulous consumption, not too far advanced, the climate of Madeira proves a certain remedy. The only obvious causes I can offer for this *constant* success are, first, the equal temperature of our climate; next, that the lungs are not irritated by any particles arising from an open fire, or by the contraction of the skin from a partial access of air, which artificial heat will always produce. Our roads too being most of them paved, and no wheel carriages used in the most inhabited part of the island, those clouds of dust never arise which dry weather produces in other parts of the world, which in hot climates will sometimes produce catarrh, and which are always found injurious to weak or diseased lungs. These are, I believe, the principal enquiries you wished to make: It is true, they are of little consequence compared to the important fact you have in view. It is, however, satisfactory to trace probable causes; and it may be well worth your while to try whether spacious buildings, regularly heated, safely ventilated, and large enough to admit of necessary exercise, may not answer the purpose for such whose want of means, of courage, or of leisure, prevent their taking a voyage to a more genial climate. I remain,

My dear Sir,

Yours, faithfully,

Madeira, Jan. 21, 1801. J. ADAMS.

To

To the Editors of the Medical and Physical Journal.

Gentlemen,

With the view of benefitting those unfortunate females who are afflicted with such deformity of the pelvis as precludes the possibility of their bearing full-sized live children, I beg leave to relate one of two successful cases of premature delivery, first recommended by Dr. Denman, which I have lately been engaged in.

In the beginning of January, I was consulted by a woman of the above description, the wife of a respectable farmer who lives about seven miles from this place. She told me, that she then wanted six weeks of her natural time of delivery, and was willing to submit to any operation that would give her the chance of a live child. Finding she had delayed applying to me a fortnight longer than she ought to have done, I immediately sent for the gentleman who had before attended her; and learnt that her two first children were feet presentations; and the latter, those of the head; that the necessary force used in extracting the præternatural presentations destroyed life; and that embryotomy, in the three last cases, was performed with the utmost difficulty, from distortion preventing the head sinking into the pelvis; I also understood that he had been twice assisted by Dr. L—w, a man of great and deserved eminence in his profession; and I have no doubt but the cases were conducted with great patience and judgment.

I immediately proposed rupturing the membranes, to which my friend not only cordially assented, but offered to attend the parturition. To be concise, I shall only observe that the os uteri was high up, inclined backward, and closely contracted; but by moderate pressure, and a rotatory motion made with the finger, it was soon dilated, sufficiently for me to introduce a male catheter, somewhat straightened. This, however, not answering the purpose of rupturing the membranes, I introduced another instrument, a little more pointed, and discharged between three and four pints of water. About twenty hours after, my patient was seized with strong labour pains, and with great difficulty delivered of a live child. The child was smaller than usual, and the presentation footling.

I am, your's, &c.

Calne, Wilts, Mar. 16, 1801. HENRY HEADLY.

Prize

Prize Questions for 1801, *&c.*

THE anniverſary meeting of the Medical Society of London, was held at their houſe in Bolt Court, Fleet Street, on Monday, the 9th of March, when the Officers and Council for the year enſuing were elected; after which the annual Oration was delivered by Mr. Chamberlaine, ſurgeon, who gave a conciſe hiſtory of the Society from its inſtitution, and made ſuitable and well deſerved panegyrics on its founders, particularly on the reſpectable phyſician who has been its greateſt benefactor.

The orator then indulged his talents in beſtowing the well merited praiſe on thoſe members who had diſtinguiſhed themſelves by their improvements in the practice of Medicine and Surgery. He, however, laid it down as a rule not to be deviated from, that the name of no *Fellow* of the Society ought to be mentioned, as all might be ſuppoſed to be *preſent*. This circumſtance led him, when enumerating the *correſponding members* who had eminently contributed to the advancement of medical knowledge, to omit the name of Dr. Jenner who was preſent, and whom Mr. C. believed to be a Fellow. The omiſſion however was amply compenſated for in the courſe of the evening, Mr. C. having been informed of his miſtake.— The annihilator of the Small-pox was drank among the principal benefactors of the human race.

Mr. C. alſo adverted to the act of parliament lately paſſed for taking an account of the population of this country, which he conſidered as likely to produce conſiderable advantage, not only to the Science of Medicine, but alſo to that branch of the mathematics which is employed in calculating the chances of ſurvivorſhip, and the duration of life, derived from the Bills of Mortality; which latter will, no doubt, in future, be placed upon a more regular and certain ſyſtem than is now practiſed. After many judicious obſervations upon the extreme inaccuracy and abſurdity of theſe Bills, which ſatisfactorily evinced the neceſſity of a reform, he adverted to the miſchief produced by the aſtoniſhing increaſe of the ſale of patent and other empiric medicines, and, in order to ſhew how much more the uſe of thoſe injurious compoſitions prevail in South than in North Britain, he obſerved that the net amount of ſtamp duties on thoſe articles paid in the former, in one year, was not far ſhort of £.14,000, while in the latter it produced ſomething under £.50, and theſe excluſive of the duty upon advertiſements for the ſame.

The Preſident then declared the adjudications of the Fothergillian

gillian, or gold medal, and also of the silver medal annually presented by the Society; the former of which was delivered to Dr. Bouttatz, a Russian physician, for his Essay on the Medical Uses of Phosphorus; the latter was adjudged to Dr. Joseph Adams, of Madeira, a corresponding member of the Society, for his paper read before them on the Framboesia Guinensis, an interesting account of a disease but little understood in this country, although common in tropical climates.

The prize subjects for the year 1801 were then announced, viz.

1. The cause of the heat in fevers.

2. The medicinal effects of arsenic externally and internally applied.

3. The distinguishing characters of Scrophula in its various stages, and in different parts of the body.

4. The causes and treatment of deafness.

5. One or more diseases, not generally known, peculiar to artificers in any branch of manufactures.

The Gold Medal, value ten guineas, will be given for the best answer to any one of the above subjects, agreeably to the following regulations:

1. Each Dissertation shall be delivered to the Secretary, in the Latin, English, or French Language, on or before the first day of November, 1801.

2. With each Dissertation shall be delivered a sealed packet with some motto or device on the outside; and within, the Author's name and designation; and the same motto or device shall be put upon the Dissertation, that the Society may know how to address the successful candidate.

3. No paper with the name of the Author affixed can be received; and if the author of any paper shall discover himself to the Council, or to any member thereof, such paper shall be excluded from all competition for the medal.

4. All the Dissertations, the successful one excepted, shall be returned, if desired, with the sealed packets unopened.

The Society continue to offer two silver medals annually; one to the author of the best Essay, read before the Society within the year, by a Fellow, that is, any Member who resides within seven miles of London; the second to the best Essay by any other person.

The following is a List of the Officers and Committees forming the Council.

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LIBRARIAN.

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5 Mr. Seaton

REGISTER.

Mr. Wheeler.

ANNIVERSARY ORATION FOR NEXT YEAR, Dr. Lowdell.

Extracts from a Letter received from DR. MARSHALL *by a Friend in London.*

DEAR FRIEND,

SINCE our laſt we have been exceedingly occupied in attending to the object of our miſſion, and our preſence here has been exceedingly à propos, the Small-pox having been at Minorca, on board the fleet, and at Malta: The day after our arrival at this place, we inoculated ſeveral children in the

Foundling Hoſpital, and from them others. In order to obtain the perfect confidence of the inhabitants, we determined to ſubject ſome of theſe children to the teſt of the Small-pox; this was done in the preſence of the Governor, the Tuniſſian Ambaſſador, the Britiſh Conſul, many of the clergy, and the medical men of the iſland. Our ſucceſs in this teſt, as you may ſuppoſe, was complete; and now the Governor, &c. give to it the moſt perfect confidence, with regard to its efficacy in ſtopping the ravages of the Small-pox.

The Governor has had Dr. Jenner's work tranſlated, and printed for the uſe of the inhabitants; and he has alſo eſtabliſhed an hoſpital for the inoculation of the poor, under the title of the JENNERIAN INSTITUTION: Thus the true name is at laſt given to this diſcovery, which it ought at firſt to have received, and which I hope now it will never loſe.

The Governor of the iſland, General Ball, is the idol of the Malteſe; he is eſtabliſhing a botanic garden, intereſts himſelf in their hoſpitals and public regulations, and among other conciliating meaſures, boaſts of the ſervice England renders them by the introduction of the Cow-pox, and delights them by the offer of having the whole iſland inoculated. As the Small-pox is now amongſt them, they have preſſed in crouds, both the nobility and the maſs of the people. At the commencement of our inoculation, in going to the hoſpital we formed a ſmall proceſſion; the Governor in his laced hat, the clergy in their canonicals, your friends Marſhall and Walker, and the medical men bringing up the train. The Governor has given us for our reſidence the moſt beautiful palace (heretofore the Grand Maſter's) of Valetta to reſide in. The ſeaſon here is moſt delightful; it is now like May with you; green peas are juſt coming in, cauliflowers, &c. are in perfection.

Amongſt the fleet and army alſo our endeavours have been very ſucceſsful. The Small-pox was ravaging, and had been very fatal; but it now ſeems to be extinct. Lord Keith and Sir R. Abercrombie have ſhewed us every kindneſs; his Lordſhip particularly recommended the Jennerian Inoculation to the fleet, as you will ſee by an extract from the Admiral's memorandum, in conſequence of the Small-pox raging in the Alexander and other veſſels.

Foudroyant, Malta, Dec. 9, 1800.

"The commander in chief thinks it neceſſary to recommend to the reſpective captains, an immediate application to Dr. Marſhall and Dr. Walker, whoſe ſafe and excellent mode of treatment has been experienced on board the Foudroyant and other ſhips, in preventing the dreadful effects ſo often attending the Small-

Small-pox, which may now so easily be avoided without danger or inconvenience.

"By command of the Vice Admiral,
"W. Young."

It being impossible, on account of the short stay of the fleet here, to complete the inoculation, it was necessary that one of us should accompany it; and the enterprising spirit of Doctor Walker could not rest till it was determined that he should go. Since he went I have inoculated the whole of the troops left here under the command of General Pigot. I have had to combat the prejudices of the people, to convince them of its efficacy; and can say, that I have at last conquered. By a frigate which came in here last night, I learn that the fleet and the army were on the 13th instant in the Bay of Marmorisse, in Asiatic Turkey; and that Dr. W. is very busy in attending to his patients. The Dey of Algiers is very anxious to have our inoculation introduced amongst them; so that there scarcely appears to be a prospect of the termination of our labours. We have been made happy by meeting here several of our acquaintance on the medical staff; and beg you to present our best respects to our friends in London. I am, &c.

Valetta, Jan. 21, 1801. J. H. MARSHALL.

To the Editors of the Medical and Physical Journal.

Gentlemen,

Being a constant reader of your valuable Journal, and a well wisher to every attempt at improvement in Medical Science, I observed with pleasure the account given in one of your late numbers, of "Diseases in the Liverpool Dispensary." As you solicit similar communications, I am induced to send you the following Account of Cases that have occurred at the Bristol Dispensary; if you think it worth insertion, it is much at your service.

Cases occuring at the Bristol Dispensary, from January 1, *to December* 31, 1800.

Asthma - - - - - - -	18	Consumption - - - -	64
Typhus Fever - - - -	176	Scrophula and Scorbutic -	16
Dysenteria and Diarrhœa -	114	Fluor Albus - - - - - -	5
Puerperal Fever - - -	23	Sarcocele - - - - - -	1
Menstrual Complaints - -	6	Peripneumonia - - - - -	42
Small-pox - - - - - -	12	Opthalmia - - - - - -	6

Continued

Continued Fever - - -	183	Bilious Complaints - -	17
Inflammation and Contufion	8	Stone and Gravel - - -	6
Dropfy - - - - - - -	33	Afthenia - - - - -	3
Hæmoptæ - - - - - -	9	Cough - - - - - - -	4
Podagra - - - - - - -	5	Meafles - - - - - - -	10
Eryfipelas - - - - - -	8	Prolapfus Uteri - - -	1
Uterine Hæmorrhage - -	14	Retrovertio Uteri - - -	1
Stomach Complaints - -	53	Laceration of the Perineum	1
Paralyfis - - - - - - -	10	Fright - - - - - - -	2
Pleuretic - - - - - -	18	Jaundice - - - - - -	1
Hæmorrhoidals - - -	2	Suppreffion of Urine - -	2
Convulfions - - - - -	3	Epilepfy - - - - - - -	2
Impotence - - - - - -	1	Painter's Colic - - - -	1
Complaints of the Head -	3	Intermittent Fever - -	3
Hectic Fever - - - - -	11	Putrid Fever - - - -	8
Nervous Complaints - -	10	Quinfy - - - - - - -	3
Acute Rheumatifm - - -	10	Spafmodic Affections - -	4
Diabetes - - - - - -	3	Cholera Morbus - - -	1
Worms - - - - - - -	2	Difeafed Kidney - - -	1
Abortion - - - - - -	8	Rickets - - - - - - -	2
Chronic Rheumatifm - -	9	Milk Fever - - - - - -	2

It may be neceffary to obferve, that the *Bristol Dispensary* was originally eftablifhed for the benevolent purpofe of attending fuch of the poor of the city, *at their own houses,* as from various circumftances are precluded from becoming *in* or *out* patients of the Briftol Infirmary, (to which therefore the charity is juftly confidered as an auxiliary,) but from this caufe the numbers who receive benefit from it are confiderably lefs than at other charitable inftitutions under the fame *name.* I am, &c.

W. D. ROLFE,

Apothecary and Man-midwife to the Briftol Difpenfary.

March 15, 1801.

N. B. I intended fending the ftate of this year's patients monthly, and alfo a ftatement of fome cafes of Dropfy, &c. treated with Digitalis, which I have been prevented doing by ficknefs of myfelf and family, but will now give two months ftate of the patients; and endeavour, for the future, to fend it monthly, with the ftate of cafes above mentioned.

State of the Patients in the Briftol Difpenfary, from the 1ft of January to the 1ft of March, 1801.

Typhus Fever - - - -	87	Uterine Hæmorrhage - -	4
Dropfy - - - - - - -	14	Rheumatifm - - - - -	10
Mania - - - - - - -	1	Spafmodic Affections -	3
Phthifis Pulmonalis - -	3	Scrophula and Scorbutic -	7
Bowel Complaint - - -	16	Simple Fever - - - -	16
Confumption - - - -	10	Peripneumonia - - -	28
Cough and Dyfpnœa - -	9	Afthenia - - - - - -	3

Leucorrhœa

Leucorrhœa	4	Puerperal Fever	4
Podagra	1	Small-pox	4
Opthalmia	2	Palſy	4
Nervous Complaints	6	Bilious	1
Cynanche Tonſillarum	1	Hernia	2
Stomach Complaints	15	Abortion	1
Aſthma	7	Menſtrual Obſtruction	3
Convulſions	4	Eryſipelas	1
Pleuretic	1	Hæmoptæ	1
Hæmorrhoidals	1		

Account of Diſeaſes in an Eaſtern Diſtrict of London, from the 20th of February to the 20th of March, 1801.

	No. of Caſes.		No. of Caſes.
ACUTE DISEASES.		Hyſteria	3
Typhus	20	Apoplexia	1
Varicella	1	Fluor Albus	7
Pneumonia	6	Amenorrhœa	6
Cynanche Tonſillaris	1	Menorrhagia	2
Inteſtinal Hæmorrhagy	1	Prolapſus Vaginæ	1
CHRONIC DISEASES.		Sciatica	2
Cough	25	Rheumatiſmus	20
Dyſpnœa	14	PUERPERAL DISEASES.	
Cough and Dyſpnœa	17	Ephemera	4
Pleurodyne	4	Menorrhagia Lochialis	3
Phthiſis Pulmonalis	5	Lochiorum Suppreſſio	1
Hydrothorax	3	Mania	1
Aſcites	2	Rhagas Papillæ	4
Anaſarca	2	INFANTILE DISEASES.	
Hepatitis Chronica	1	Ophthalmia	3
Diarrhœa	12	Ophthalmia Purulenta	2
Cephalæa	4	Aphthæ	3

We had occaſion to remark in our laſt Report, that the change which had taken place in the temperature of the atmoſphere, would probably increaſe the number, and aggravate the ſymptoms of thoſe diſeaſes which generally prevail at this ſeaſon of the year. What it was but natural to expect, has actually taken place. Thoſe perſons, who from the mildneſs of the ſeaſon entertained the hope of paſſing through the winter without a recurrence of thoſe diſorders to which they had heretofore been liable, were reminded of their conſtitutional infirmity upon the approach of the froſt.

Catarrhal affections, Peripneumonies, Phthiſis Pulmonalis, and other morbid affections of the organs of reſpiration have increaſed in their number, or have been attended with an aggravation of ſymptoms.

ſymptoms. The froſt, however, which was ſufficient to introduce this claſs of diſeaſes, was too ſhort in its continuance to produce a favourable change in the ſtate of another claſs. A fever, which has long been conſidered as the prevailing epidemic, ſtill prevails, and thoſe alarming affections of the head, which we have had ſuch frequent occaſion to remark, ſtill continue to form a diſtinguiſhing characteriſtic of the diſeaſe.

Varicella or Chicken Pox, a ſingle caſe of which appears in our liſt, is a diſeaſe of ſo mild a nature as not often to require much medical attention. It is generally introduced by a ſlight degree of fever, attended with trifling pain in the head or back, ſometimes with ſlight cough and a general laſſitude. About the third day an eruption appears on ſome part of the body, which in its progreſs aſſumes rather the appearance of veſicles than puſtules, which arrive very ſoon at the ſtate of maturation, and diſappear more haſtily than the ſmall-pox. In the inſtance referred to in the liſt, this diſeaſe, which occurred to a child of nine years old, aſſumed a more unpleaſant appearance. A conſiderable degree of fever preceded the eruption, and this was of ſuch a nature as not to be eaſily diſtinguiſhed at firſt from the Small-pox. The number of puſtules, together with their ſize and appearance, might, for a time, have led to a doubt reſpecting the nature of the diſeaſe; there was ſufficient evidence, however, of this patient having been before infected by the Small-pox.

From ſuch puſtules, very probably, matter has been ſometimes taken, with a view to inoculate the Small-pox; and the patient, ſome time after receiving this ſlighter diſeaſe, has been affected by the Small-pox, and an opinion has been entertained that, in this inſtance, the infection has been received a ſecond time.

Diſeaſes admitted under the Care of the Phyſicians of the Weſtminſter Hoſpital, from Dec. 24, to March 25, 1801.

Continued Fevers	50	Diarrhœa	10	Jaundice	1
Intermittents	1	Dyſpepſia	3	Lithiaſis	3
Pleuriſy	4	Dyſpnœa	2	Obſtipatio	3
Small-pox	1	Enterodynia	2	Paralyſis	2
Amenorrhœa	10	Gaſtrodynia	3	Phthiſis	2
Anaſarca	7	Hæmatemeſis	1	Syncope & Palpitation	2
Aſcites	4	Hæmaturia	1	Pleurodyne	1
Aſthenia	6	Hæmoptyſis	1	Podagra	1
Aſthma	2	Hæmorrhois	1	Rheumatiſm	19
Catarrh	12	Hydrothorax	1	Struma	13
Cephalæa	6	Hydrops ovarii	1	Tabes	2
Chloroſis	3	Hyſteria	4	Tinea	1
Chorea	1	Impetigo	9	Worms	1
Colic	4	Iſchuria	1		
Cough	22	Itch	3		

The greateſt part of the fevers were of the typhoid kind, as uſual at this ſeaſon of the year; but there were many of them that more reſembled the autumnal bilious fevers, and in all of them there was an unuſual tendency to delirium. T. B.

Mr. BRADLEY's *Cases in Surgery, &c.*

[Continued from our laſt, pp. 219—223.]

Case of Triſmus, or Locked-Jaw.

LYDIA KAYE, aged 20 years, of a full habit and ſanguine conſtitution, and fifteen weeks advanced in her pregnancy, had the misfortune to receive a blow from the head of a floor-bruſh, on the back part of her head, at its articulation, which knocked her down. She was taken up ſenſeleſs, and laid on a bed. Three hours afterwards, I found her in the ſame poſition in which ſhe was laid. Her head was thrown backwards, and inclined rather to the right ſide. The part on which the blow was inflicted, was ſomewhat full and painful, but without any diſcolouration or muſcular rigidity. Her pulſe was quick and fluttering, and her reſpiration panting, and very frequent. Her jaw was locked ſo cloſe, as to render it very difficult to paſs the handle of a table ſpoon flat-wiſe betwixt her teeth. On pouring a little water from a tea ſpoon into her mouth, ſhe ſeemed to make one effort to ſwallow; but, on repeating it ſeveral times, no further attempt at ſwallowing was made, and the water regurgitated, without exciting any apparent action of the ſtomach or lungs. The eye-lids were about two-fifths open, and were looſe, and afforded no reſiſtance on opening them: The upper, when elevated, might be about ten or twelve ſeconds in receding to their former poſition. The eye-balls were drawn upwards, and fixed, inſomuch, that little more than the verge of the cornea was diſcernible; the pupil alſo was very much dilated, and exhibited not the leaſt contraction on being expoſed to the light. She was hot, and perſpired freely, eſpecially on the cheſt. No further injury ſeemed to have been done to any other part of the body, except a ſlight contuſion on the left temple, extending downwards to the articulation of the lower jaw. This part, on preſſure, always afforded her pain, and which was known by her moaning and moving her right arm, although theſe two ſymptoms ſometimes exiſted independently of this cauſe. The maſſeter-muſcles were full, and contracted, eſpecially the left.

On attributing theſe ſymptoms in ſome meaſure to *hyſteria*, a ſolution of *emetic tartar* was ordered to be taken at intervals; and notwithſtanding her inability to ſwallow, a quantity was taken in the courſe of the night, ſufficient to puke her twice, but

but without affording her any kind of relief: A bliſtering-plaſter was alſo laid betwixt her ſhoulders.

On the following day, (Sept. 14th), her ſymptoms were very little mitigated. Her head was in the ſame poſition, and the back and injured part of the neck was painful, though not much ſwelled. She was reſtleſs, eſpecially with her hand, and would only lie on her right ſide; for, by this time, ſhe could turn herſelf in bed. Her jaw was equally as much locked, yet her pulſe was fuller, and more diſtinct, though yet quick, and her breathing had become more natural. She had had no ſtool, but had made water once, and previous to which, had given ſome indication of her wants. The plaſter had wrought well, and ſhe was of a natural heat, unattended with any perſpiration. Her eyes were in the ſame ſtate, both with regard to the eye-lids, eye-balls, and immobility of the iris; and ſhe had not yet attempted to ſpeak. Ordered twelve drops of *tinct. opii* to be taken every hour, in a table ſpoonful of the following mixture:

℞. Tinct. Valer. ʒiij. Tinct. Caſtor ʒj. Aq. fontan ℥vij. M.

But previous to her taking this medicine, an emollient glyſter was ordered; but, through the obſtinacy of her friends, was not adminiſtered; and, contrary to my advice, loſt nine ounces of blood, which ſeemed to ſink the pulſe, without producing any effect on the jaw. To-day, however, ſhe gave the firſt indication of being ſenſible; for, during the operation of bleeding, ſhe kept her arm quite ſteady, whereas before, it was almoſt in a ſtate of continued motion. She only took ſix times of her medicine to-day, all of which made her ill, and gave her pain at her ſtomach, of which ſhe had no relief, till ſhe threw up. The third, fifth, and ſixth doſes were, however, only rejected.

The neck and left ſide of the face were ordered to be rubbed with the following liniment, three or four times a day.

℞. Liniment. Ammon. ℥jſs. Tinct. Opii. ʒij. M.

She found great relief from this application, and ſignified a wiſh for a more frequent uſe of it.

15th. Her pulſe was fuller, and not ſo quick, and during the night, ſhe had frequent intervals of repoſe; though ſcarcely yet any alteration with regard to the jaw. She appeared, however, to be more ſenſible, and frequently laid her hand on her forehead, and the back part of the neck.

The ſmall degree of tenſion occaſioned by the blow, was reduced, and the muſcles of the neck were more lax, though hitherto they exhibited no appearance of ſtrong contraction. With reſpect to the eyes, there was little variation; but ſhe had nearly the power of ſuſtaining her head, which hitherto had been guided by the force of gravitation, and could bring it more

more forwards, but not quite vertically. She was cool; had perſpired none; took a little tea and chicken broth, and ſipped them through her teeth; had alſo made water once in the night, but yet had no ſtool. Ordered eight drops of tinct. opii to be given in a table ſpoonful of cold water every hour. This medicine ſhe could only be perſuaded to take once, as it again diſagreed with her, but it was not rejected.

16th. She this day could diſtinguiſh colours, and even objects, notwithſtanding her eyes were apparently in the ſame ſtate. She ſlept moderately in the night, and made water plentifully; but even yet had no ſtool. Her pulſe was becoming natural, and her appetite improving daily, but the jaw gave way very little. The muſk mixture was ordered, but ſhe refuſed taking it.

17th. Much the ſame as yeſterday, touching the ſtate of her jaw. Had ſlept moderately in the night, and had made water twice, and towards morning had a motion, by the aid of a ſuppoſitory, compoſed of boiled treacle, with the addition of a little ſalt and butter. Her pulſe was good, (at about 86), and ſhe continued taking her liquid nouriſhment, but yet no ſolids, and ſigned for every thing ſhe wanted; for yet ſhe had not attempted to ſpeak. She ſat up an hour to-day, but with difficulty; could either bring her head forwards, or keep it ſteady; and ſhe alſo walked three yards acroſs the room. Ordered two-thirds of a grain of purified opium to be taken every three hours.

18th. She reſted during the latter part of the night very well, and took five doſes of her medicine, two of which ſhe rejected almoſt immediately, and the reſt ſtayed only whilſt any liquid was taken into the ſtomach: When not thrown up, the opium never failed, as uſual, to make her extremely ill, which ſhe always ſignified by laying her hand on her ſtomach. Her pulſe was approaching more and more to the natural ſtandard. She had a looſe ſtool to-day of a chocolate colour, and very offenſive, and made water freely as uſual. The jaw, though yet very ſtiff, was ſomewhat more free than yeſterday. She can now hold her head vertically, but not long together, as it gives her great uneaſineſs. As to her eyes, there is no apparent alteration.

19th. No muſcular contraction of the face, neck, or any other part appeared to exiſt; yet, notwithſtanding, her jaw was conſiderably locked, but not ſo firmly but a moderate force would ſeparate it one-tenth of an inch. In other reſpects, there was ſome variation, for ſhe could now mutter ſome words, though very indiſtinctly. She made water twice to-day,

Tt2 but

but had no ftool, and the ftate of her eyes were much as ufual. Ordered a tea-fpoonful of æther to be taken four times a day.

20th. Her jaw was fomewhat freer, as fhe could open it about one-feventh of an inch with her own hands. Her pulfe was become natural, and her fpirits good, and fhe walked more about the room. She ate minced meats now with a tolerably good appetite, and articulated fomewhat better, but was yet difficult to be underftood. She had one motion to-day, and made water twice, and faid her medicine did her much fervice, and was anxious to continue it. She had alfo fome little return of motion in the eye-balls, and they appeared lefs diftorted.

21ft. She articulated rather better, though yet very imperfectly; but her fpafm was daily giving way. She was cheerful and lively, and had regained fome ufe in the eye-lids and eye-balls. On clofing the eyes, the pupil became fo far depreffed, that the axis of vifion appeared parallel with the horizon; but on opening them, the pupil inftantly receded upwards. Some motion alfo was reftored to the iris, but too great a degree of light feemed offenfive to her, although fhe imprudently was amufing herfelf to-day with fome needle-work, but on reprefenting its impropriety, it was difcontinued. She complained fometimes of a little pain and ftiffnefs on the left fide of the jaw, at its articulation, but the bruifed parts exhibited no further marks of injury. She was without ftool to-day, but made water plentifully as ufual.

22d. Her jaw and fpeech were much the fame as yefterday; but in other refpects feemed rather worfe, occafioned probably by omitting her medicine. Her appetite was very indifferent, and her fpirits were dull and flat. She was ftill without ftool, and refufed all the means of procuring any. Ordered a grain of opium every three hours, in fubftance, along with a tea-fpoonful of the æther, in a table fpoonful of cold water, although it was with great difficulty fhe could be prevailed on to take the former medicine again.

23d. Slept well in the night, and had taken her medicine fix times, with good effects; not only in loofening the jaw, but in agreeing with the ftomach. Her fpirits were unufually good, and the appearance of her eyes more natural. She had alfo one motion, and made water as ufual, but her appetite was ftill indifferent.

24th. Difcontinued the opium yefterday, as fhe refufed taking it any longer, but the *æther* was perfifted in as before. The jaw continued giving way, and fhe could open it fo far, without affiftance, as to introduce her fore finger into her mouth. She fpoke alfo more intelligibly; I myfelf could comprehend feveral

ſeveral words, ſuch as *milk*, *meat*, *no*, *&c.* and had now regained a tolerable uſe of her eyes and eye-lids, and could look in all directions; although yet, there ſeemed a ſtrong tendency to look upwards, eſpecially if ſhe fixed her eyes ſtedfaſtly for a moment, either in a horizontal or oblique direction downwards. The iris had now regained its uſual power of contraction and dilatation. She had a natural ſtool to-day, and made water well, but her appetite was yet indifferent. She gradually, however, recovered her ſpeech and general health; but the jaw continued to give way very ſlowly, notwithſtanding the uſe of æther a week longer; and even after the ſpaſm was apparently removed, ſhe complained of a ſtiffneſs a month or five weeks afterwards.

The urine throughout this diſorder was plentiful, and natural in colour, and voided without pain or difficulty, a circumſtance not frequent in *tetanus*. There was a ſtrong tendency to coſtiveneſs, and to obviate which, moſt of the neceſſary means were denied; although, it muſt be confeſſed, that ſhe experienced little or no inconvenience from it. The pulſe, ſoon after the accident, was 136, but daily became ſlower, and more diſtinct, inſomuch, that on the fifth day of her illneſs, they were at or below 90. The blood that was drawn was rather of a looſe texture, conſidering the age and habit of the patient; and bleeding, under ſimilar circumſtances, I am perſuaded, will be inadviſeable.

As the locked-jaw is generally conſidered as a ſymptom of *tetanus*, and no other ſign of this affection being here preſent, we may fairly refer the above caſe to ſome other ſpecies of ſpaſmodic affections. Here was no pain at the *ſcrobiculus cordis*, in the thorax, or abdomen, nor pain or difficulty in ſwallowing; and as to the *opiſthotonos*, it may be conſidered as rather proceeding from pain in the injured part of the neck, than from any muſcular contraction.

How far the circumſtance of pregnancy, eſpecially as being nearly the time of quickening, might have in conjunction with the accident, a power in occaſioning the complaint; or whether the latter, independent of the former, was capable of producing it, are perhaps both equally doubtful and uncertain. One circumſtance, which goes particularly towards characterizing this complaint a different ſpecies of *triſmus*, is, the very remedy, no leſs than a ſpecific againſt tetanus in general, not only diſordering the ſtomach, but bringing on a pain at the *ſcrobiculus cordis*, which may be conſidered as the pathognomonic ſign of that affection.

Whence we may conclude, that the locked jaw is not neceſſarily connected with, or dependent on *tetanus*; and that *opium* is

is not always a ſpecific in this complaint, for although here, when it ſtayed ſome time upon the ſtomach, its antiſpaſmodic virtues were diſcernible; yet from its unfriendly effects on that organ, a too frequent repetition of it would have been highly unwarrantable. So far from the opium being in this caſe a ſpecific, that it ſeemed to act only in a ſubordinate degree, requiring not only the æther to keep it on the ſtomach, but to prepare that organ for its reception; and even when it was retained ſome time before it was rejected, its antiſpaſmodic effects were not what might have been expected. One particular phenomenon manifeſted itſelf with regard to the eye; for, notwithſtanding the diſtortion of the eye-ball, and the preternatural dilatation and immobility of the *iris*, the patient could diſcern not only colours but even minute objects. The day after bleeding, ſome vivid colour (I believe blue) was accidentally expoſed to her ſight; and her friends were ſenſible of her ſeeing it. This circumſtance gave riſe to a few experiments, the reſult of which proved, that ſhe could ſee or diſcern objects when placed at a certain diſtance. For inſtance, a pen-knife was placed at two inches diſtance, and ſhe ſignified what it was. A half-penny and a pin were alſo placed at certain diſtances, the latter at about one inch, which ſeemed to be the proper *focus*. Theſe ſhe alſo diſcovered; but the pen-knife ſhe could not ſee at ſix inches diſtance. When theſe experiments were made, the eyes were exactly in the ſame ſituation as deſcribed in the narrative; namely, about two-fifths cloſed, and exhibiting little more than the diſk of the cornea, if it may be ſo called, through the eye-laſſes: At this time, on opening the eye-lids, ſo as to expoſe the cornea to the effects of the light, there appeared a ſlight oſcilation of the eye-ball upwards; but on cloſing the eye-lids, it reſumed its former ſituation.

This ſtate of the eyes, with the nature of viſion, tend much to favour the theory of *Dr. Hosack* of *New York*, who maintains, that the *recti* muſcles of the eye contribute much in lengthening or ſhortening the axis of viſion, by enlarging or diminiſhing the refracting medium; and that in proportion as the axis becomes elongated, the eye is rendered leſs capable of ſeeing objects at a diſtance, as was the caſe here.

Mr. Young, in the *Philoſophical Tranſactions*, ſuppoſes the ſole uſe of the retina and optic nerve is, to convey ſenſation to the brain; and this caſe perhaps alſo favours his conjecture, ſince the patient could ſee very well, when the object was applied at a proper diſtance from the eye, notwithſtanding the iris exhibited no ſenſibility when expoſed to the light.*

For

* Her eyes would have been expoſed to a ſtrong candle-light, had not the obſtinacy of her friends prevented me.

For if the ſenſitive power of the iris depends on any connection with the *retina*, why ſhould the function of the former be ſuſpended, whilſt the office of the latter remained unimpaired? There ſeems little doubt of the nerves which ſupply the muſcles and coats of the eye being affected; and equally the ſame certainty of the retina being unaffected; and conſequently in this diſtorted and preternatural ſtate of the parts, no apparent connection may be thought to exiſt betwixt the one and the other; yet this inference is far from being concluſive, when applied to the natural ſtate of the eye, as the phenomena produced by the deranged ſtate of that organ ſeem incompetent to ſolve any of the difficulties relating to viſion in general. The circumſtance of the retina retaining its function whilſt the power of the iris was apparently deſtroyed, may probably, on a due conſideration of the caſe, be accounted for, more eſpecially if we take into the account the alteration effected both in the appendages, form, and contents of the eye. Here we ſuppoſe the *elevator* muſcle to be ſtrongly contracted, which would draw up the eye-ball along with it, thereby making only a ſmall preſſure on its contents; whereas, the counteracting force of the *depreſſor* would preſs ſo powerfully on the under part of this organ, as neceſſarily to puſh up its contents, deſtroy its globoſity, and conſequently to diminiſh its cavity. Hence the cryſtalline humour is puſhed forward through the anterior chamber, which would not only enlarge the pupil, but prevent its contraction. That the pupil becomes enlarged in proportion as the axis of viſion is elongated, it ſeems evident from a *ſpeculum* preſſing ſtrongly on the globe of the eye, and which increaſes the dilatation thereof in a correſponding degree; and beſides, during this enlargement of the pupil, whilſt this inſtrument is applied, little or no motion is diſcernible in the iris, when the eye is expoſed to alternate light and darkneſs. From the ſame reaſons alſo that the pupil is enlarged as the axis of viſion is lengthened, the former becomes leſſened as the latter is ſhortened. This is particularly exemplified in youth and old age.

In the month of July following, I again ſaw this young woman, who complained of weakneſs and watering of her eyes, eſpecially on looking downwards, and could not bear to look ſtedfaſtly at any object. She complained alſo of pain in the head, which it appeared ſhe had been ſubject to, eſpecially in the ſummer ſeaſon, and which ſhe deſcribed as now ſhooting from the fore to the back part of the head, and downwards to the original ſeat of the injury. She ſtill was poſitive ſhe could diſtinguiſh any object, or colour, after ſhe became ſenſible, if held at a proper diſtance from her eyes. She made water as before,

before related, the night after the accident, and ſigned for the neceſſary aſſiſtance, as ſhe always did afterwards. Notwithſtanding this circumſtance, ſhe never recollected any thing from the time of the accident (being Thurſday), till the Sunday following; the clock ſtriking one, being the firſt thing ſhe could remember. She was confident the *opium* always made her ill, and cauſed pain at her ſtomach, eſpecially when taken without the æther, which was relieved only by vomiting; and when taken in conjunction with this medicine, its unpleaſant effects were nearly obviated; when the æther was, however, taken by itſelf, ſhe ſaid it did her more ſervice; and, according to her own expreſſion, always revived her. The eyes appeared diminiſhed in ſize, and the iris to contract very powerfully. The pupil alſo of the right eye, when in a ſtate of contraction, aſſumed an oval form.

In juſtice to Mr. Pearſon, (by whoſe hand we were favoured with Mr. Bradley's Caſes in Surgery) it may be proper to ſay, that the teaching of the medical practice requiſite in Surgery has been his principal object during a ſeries of eighteen years, as the text book of his Lectures evinces. He is, we believe, the firſt perſon in this kingdom who undertook to reduce the principles of Surgery into a ſcientific form, and to explain at great length, all the moſt important chirurgical diſeaſes, and the mode of treating them. Each of his Courſes contains a much greater number of Lectures on Surgery, (although he includes all the operations) than any Courſe ever delivered in London. EDIT.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

YOUR exertions in aid of MEDICAL Science, and, conſequently, in ſubſervience of the intereſts of ſuffering humanity, juſtly entitle you to the warmeſt thanks of the profeſſion, as well as to thoſe of the community at large.

At the commencement of your Journal, I was induced to believe it would eventually prove a highly uſeful and valuable medium of *medical* communication: the regular gradation of *intereſt* and *improvement* in the ſubſequent Numbers, hath amply juſtified the idea; and the plan you have adopted, renders it, in my opinion, more happily calculated for the diffuſion of *profeſſional* information, than any periodical publication which I am acquainted with in our language.

Under this conviction, and anxious to contribute my mite to the common fund, I have taken the liberty of tranſmitting you

you a few FACTS, illuſtrative of the *hiſtory*, *nature*, and *medicinal properties* (chiefly) of certain *articles* and *preparations* of the *Materia Medica* and *Pharmacopæias*; which, from having long been conſidered as *dangerous* by ſome, and *inert* by others, had *nearly*, if not *wholly*, fallen into diſuſe.

What I have to ſtate of a *practical* nature, is the fair reſult of extenſive trial (for the moſt part) in the courſe of *my own* experience. For the ſake of method, I have arranged the ſeveral ſubjects in the *form* of *numerical*, and under the title of MEDICAL ESSAYS. Should the *facts* they contain be of the ſmalleſt *utility* to, and eſpecially were they to prove the *means* of exciting the *experimental reſearches* of other practitioners, it would afford me the moſt grateful ſatisfaction, from the conſideration that a well-directed enquiry into the *medicinal powers* of thoſe potent but imperfectly known phyſical treaſures, with which the ample kingdom of Nature is ſo abundantly ſtored, muſt neceſſarily be productive of the moſt *eſſential* and *permanent* advantage to MANKIND. I am, &c.

EDWARD OXLEY,

Member of the Royal College of Surgeons of London, and Surgeon to the "Poor and Strangers Friend Society," at Hull.

Hull, November 30, 1800.

MEDICAL ESSAYS.

No. I.

On the Hiſtory, Nature, and Medicinal Properties of the ANTHEMIS PYRETHRUM,

Spaniſh Camomile, or Pellitory of Spain.

SYNONYMA. Pyrethrum. *Pharm. Lond. et Edinb.* Pyrethrum flore bellidis, *Bauh. pin. p.* 14, 8. Pyrethrum officinarum. *Lob.* 447. *Gerarde Emac. p.* 758. *Park. Theat. p.* 858. *Raii. Hiſt. p.* 353. Chamœmelum ſpecioſo flore radice longa ſervida. *Shaw Afric. p.* 138. Anthemis caulibus ſimplicibus unifloris decumbentibus. *Miller, fig. t.* 38. Πύρεθρον. *Dioſcorides, lib.* 3, *c.* 85.

Claſs. Syngeneſia. *Ord.* Polygamia ſuperflua, *Linn. Gen. Plant.* 970.

Eſs. Gen. Ch. Recept. paleaceum. *Pappus* nullus. *Cal.* hæmiſphæricus ſubæqualis. *Floſculi* radii plures quam 5.

Sp. Ch. A. caulibus ſimplicibus unifloris decumbentibus, foliis pinnato-multifidis. Vide *Woodville Med. Bot. vol.* 2. *p.* 286.

HISTORY, &c. The ROOT is perennial, of the ſize of a man's finger, and of the colour of horſe radiſh, long, tapering, and ſendeth off numerous ſmall fibres. STEMS, uſually ſimple, round, trailing, ſcarcely a foot in height, and bearing one flower; LEAVES, pinnate; SEGMENTS, narrow, nearly linear, and of a pale green colour; FLOWER, large at the diſc, of a yellow colour; at the radius, white on the upper, and of a purple colour on the under ſide: The different FLORETS anſwer to the deſcription given of the ANTHEMIS *nobilis*. It flowereth in June and July.

The ANTHEMIS *pyrethrum* is a native of the Levant, and the warmer latitudes of Europe, but eaſily bears the winters of this climate; flowering from December until May, but doth not ripen its ſeeds here, unleſs the ſeaſon proves very warm and dry. It was firſt cultivated in England by LOBEL, in 1570, and afterwards by Mr. MILLER, in 1732: That obtained from abroad, however, is much the beſt for *medicinal purposes*; the only part employed for which, is the dried root; this comes to us in pieces of three or four inches in length, and from the ſize of a man's finger down to that of a common quill; (the ſmaller, as containing the greater quantity of reſinous matter, ſhould be preferred) when good, it is externally of a light brown colour, and hath a rough unequal ſurface; internally is of a whitiſh hue, and ſtriated texture; hath ſcarcely any perceptible ſmell, but if chewed in the mouth, diſcovereth a pungency of a very peculiar and powerful kind, exciting a copious flow of ſaliva; this ſtimulating quality is found to reſide in a fixed reſinous matter, of a deep red colour, which is lodged in numerous capillary receptacles, ſituate in the exterior, or cortical portion of the root. Rectified ſpirit extracteth the *whole* of its warmth; water very little; and no part of it is carried off in diſtillation or evaporation by either of theſe menſtrua.

MEDICINAL PROPERTIES. It is an act of juſtice due to the memories of the antients, to obſerve of this truly valuable article, that, although neglected and almoſt unknown in *modern* practice, it hath been celebrated for its virtues from the dawnings of medical ſcience, and the far diſtant ages of antiquity. DIOSCORIDES, the earlieſt author who wrote profeſſedly on the *Materia Medica*, and who is ſuppoſed to have lived not leſs than 1700 years ago, ſaith, "*it taketh away the cold ſhivering of agues, and is efficacious in the dead palſy.*" GERARDE, who wrote 200 years ago, ſpeaks of it as a powerful remedy in *chronic head-achs, vertigo, apoplexy, palſy, epilepſy, muſcular debility, and pains of the teeth, &c.* From the time of GERARDE to that of CULLEN, the Engliſh authors of

of repute whom I have had an opportunity of conſulting, make but very ſlight mention of the PYRETHRUM, and are, for the moſt part, *negative* as to its virtues, confining its uſe merely to that of a *maſticatory*. *Dr. Woodville*, however, in his elegant and intereſting work, the MEDICAL BOTANY, obſerves, with the greateſt propriety, that, "from the aromatic and ſtimulating qualities of the PYRETHRUM, there can be no doubt that it might be found an efficacious remedy, and equally fitted as an *internal* medicine, as many others of this claſs now conſtantly preſcribed." On this ground, of its *ſenſible qualities* alone, and ſeveral years ago, my firſt experiments were made; the favourable reſult of moſt of which, together with the ſucceſs of various ſubſequent trials, afford, in my opinion, the moſt decided confirmation of Dr. WOODVILLE's remark, as well as ample proof that DIOSCORIDES and GERADE, if fanciful in many inſtances, in this, at leaſt, ſpake the language of truth and experience.

It is peculiarly unfortunate for my preſent purpoſe, however, that owing to my not having ever entertained even the moſt diſtant idea of publiſhing, previous to the appearance of the MEDICAL JOURNAL, I committed ſuch *relative facts*, as occurred in the courſe of my experiments with the pyrethrum, chiefly to *memory*; in conſequence of which, many important circumſtances have, through the lapſe of time, and other concurrent cauſes, eſcaped my recollection. The following (which, I truſt, will ſuffice to induce other practititioners to purſue the experimental enquiry) are amongſt the leading particulars which ſtrike my remembrance.

CASES.

PARALYSIS *Rheumatica*. *Mary R——*, a poor woman, aged 46, of low ſtature, and extremely meagre and impoveriſhed habit, in conſequence of long expoſure to ſevere cold in the autumn of 1797, was ſeized with violent pain in the bowels and extremities, and two weeks after, completely loſt the uſe of the latter. I firſt ſaw this patient in the month of *November* following, ſome weeks after the attack of the complaint, and found her ſuffering the moſt excruciating torture, with ſcarcely an interval of eaſe; the whole frame emaciated and debilitated to the laſt degree; pulſe exceedingly feeble; appetite gone; and the upper and lower extremities much ſhrunk, contracted, and without the leaſt power of motion. Being a little inclined to coſtiveneſs, I preſcribed an aperient, namely, ℞. *Pil. aromat.* ʒ*iſs. in pil. xviij. divid. ſum. iij. hora, ſomni. et repet. pro re nata.* Theſe procured a paſſage, and the ſucceeding morning gave the following; ℞. *Aq. menth. pip.* ℥7·

ſpt. æther nitros. tinct. cinnam. c. ℥vj. *m. fiat. miſt. ſum. coch. iij. mag. 4tis. horis.* This form was occaſionally varied; but no favourable change appearing, after a few days were elapſed, recourſe was had to full doſes of the higher claſs of *ſtimuli*, *Spt. æther nitr. æther vitriolic. tinct. opii. c. tinct. opii*, &c. were alternately adminiſtered, and the moſt powerfully ſtimulating embrocations were frequently applied to the extremities; theſe, however, affording only a very partial and temporary alleviation of the pain, and not the leaſt relief of the other ſymptoms, were laid aſide alſo, and the following ſubſtituted in their place. ℞, *Pulv. rad. pyrethri* ℈j. *Ol. ſaſſafras. gtt.* 5. *conſ. cort. aurant. vel mucil. gum. Arab. q. s. fiat. bolus hora,* 11*ma. matutin. et hora ſomni ſumend.* A very ſenſible alteration for the better now took place, the patient experienced an almoſt *immediate* ceſſation of the pain, and in the courſe of a few days was able to waſh and dreſs herſelf: The doſe of the PYRETHRUM was then increaſed to *gr.* 50, and the *ol. ſaſſafras* to *gtt.* 10. *bis in die*; the reſult of which was, that in ſomewhat leſs than *two* weeks ſhe had ſo far recovered the uſe of her legs, as to be able to walk with the aſſiſtance of crutches; and by perſevering in the ſame plan for the ſpace of two weeks more, (excepting a ſlight contraction of her fingers) no ſymptoms of her malady remained; the pulſe was become natural, the torpor of the ſtomach was removed, the appetite returned, and ſhe was enabled to uſe her needle and attend her houſehold buſineſs as uſual.

PARALYSIS *Paraplegica.* *Elizabeth T——*, aged 47 years, of middle ſtature, and ſpare but not unhealthy habit, on the ceſſation of the catamenia, (which took place at 44), was attacked with almoſt inſupportably violent pain, alternately in the loins and region of the uterus, attended with conſiderable tumefaction of the abdomen. In this ſtate ſhe continued for the ſpace of *two years* and a half, during the latter part of which, her ſituation was rendered ſtill more peculiarly diſtreſſing by a ſupervening aſthmatic affection, the conſequence of imprudent expoſure to chill and damp air. Five months ago the pain *entirely* and *unexpectedly* left her, and eight weeks after this the abdominal tumour *wholly* and very *ſuddenly* ſubſided; the morning following which, on her attempting to raiſe from her bed, as uſual, ſhe found ſhe had completely loſt the uſe of her lower extremities, which were cold, rigid, and perfectly inſenſible to the touch. I was firſt requeſted to attend her the 26th of *October* laſt; found her ſituation as above deſcribed, with the pulſe natural, the evacuations healthy and regular, and the appetite good. Gave the following bolus: ℞, *Pulv. rad. pyrethri.* ʒſs. *ſyr. cort. aurant. q. s. fiat. bolus hora ſomni ſumend*; and to

to allay the ſpaſmodic irritation in the cheſt, ℞. *Aq. menth. pip.* ℥ *j. spt. æther. nitro. tinct. opii. camph. aa.* ʒ*ſs.*——*Zinzib.* ℈*iij. m. ft. miſt. sum. coch. iij. mag. 4tis. horis.* This enabled the patient to breathe more freely, allayed the extreme violence of the cough, and procured a few hours refreſhing reſt, which ſhe had long been prevented the enjoyment of. *October 27th and 28th,* the *boluses* were repeated; on the 29th, the warmth and ſenſibility of the lower extremities returned, and the rigidity was ſo far overcome as to admit of the free and alternate motion of the joints. In compliance with the wiſhes of the patient, the PYRETHRUM was omitted for five days, at the expiration of which, namely, on the 2d of the preſent month *November*, it was re-employed in the following (as a leſs ungrateful) form, ℞. *Pulv. rad. pyrethri.* ʒ*j. ol. menth. pip. gtt.* 5. *cons. cort. aurant. vel mucil. gum. Arab. q. s. fiat. pil. No.* 18. *ſumat iij. bis in die:* And to obviate coſtiveneſs, gave occaſional and mild aperients. *November* the 5th, the patient could walk about the room with the aſſiſtance of chairs, but at this period experienced a very ſevere attack of *cholera*, (the prevailing epidemic) which reduced her ſtrength conſiderably, and the PYRETHRUM was once more neceſſarily omitted for eighteen days, in order to make way for other remedies. November 24th, again had recourſe to it, as follows: ℞. *Pulv. rad. pyrethri.* ʒ*iſs. mel. anglic. q. s. fiat. pil. No.* 36. *sumat. iij. ter in die.* Under this form, have continued its exhibition until the preſent time, and with evident and daily-increaſing advantage to the patient, who hath now regained ſufficient ſtrength to enable her to walk with very ſlight ſupport; and if it is allowable to infer from previous and ſucceſsful experience, have no doubt that in a few weeks I ſhall have it in my power to announce her entire recovery.

LUMBAGO. *Thomas S*——, ſeaman, aged 26 years, of tall ſtature, ſtrong, athletic make, and remarkably healthy habit, on the 10th of *November* inſtant, was ſeized with very ſevere pain and great rigidity in the muſcles ſituate on the loins; on the 12th I was requeſted by the owner of the ſhip to which he belonged, to attend him, and ordered the following: ℞. *Spt. terebinth, ol. olivar. aa.* ʒ*vj. aq. ammon. pur.* ℥*ſs. M. fiat. liniment. purt. affect. ter in die applicand.* ℞. *Tinct. opii. gtt.* 60. *T. opii, camph. ſpt. æther. nitros. aa.* ℥*ſs. M. sumat. coch. j. parv. 4tis. horis, in aq. font.* On the 13th found the ſymptoms more violent than before, and the patient complaining of coſtiveneſs, gave as follows: ℞. *Calomel. gr. vj. cons. cort. aurant. q. s. fiat. bolus hora somni ſumend:* ℞. *Infus. sennæ* ℥*vjſs. natron. vitriol.* ℥*iſs. ſacchar. rubr.* ℥*ſs. M. fiat. mist. sum. coch. iij. mane. et repet omni hora pro re nata.* Theſe anſwered the purpoſe

poſe of opening the bowels, but yielded no other relief. On the 16th, the pain and ſtiffneſs were preciſely the ſame, and the integuments of the part had acquired a livid hue. The form of the anodyne, preſcribed in the firſt inſtance, was now varied, and re-employed as follows: ℞. *Tinct. balſam Peru* ℥j. *Opii gtt. lx. fiat. tinct. sum. coch. j. parv. 4ts. horis. in aq. hordeat.* This afforded a momentary alleviation of the pain, which however returned on the 17th, as ſevere as before. Baffled in my expectations from every means hitherto employed, had recourſe to my *forlorn hope*, and favourite remedy, the PYRETHRUM, in the following form: ℞. *Pulv. rad. pyrethri.* ʒij. *mel. anglican. q. s. fiat. elect. ſum. coch. j. parv. 3tiis. horis.* The firſt doſe abated the violence of the ſymptoms; in about 18 hours, the patient had taken the whole of the electuary, and in little more than 24, the pain and ſtiffneſs were entirely gone, the integuments had re-gained their natural colour, and not a trace of the malady remained.

INTERMITTENTES. *Pyrethrum* furniſhes a highly uſeful addition to the *cinchona*, in the cure of intermittents; I have employed it in conjunction with the latter article, in various caſes of obſtinate TERTIAN, and with uniformly good effect. On thoſe occaſions, it was commonly exhibited under the following, as the moſt eligible form. ℞. *Pulv. rad. pyrethri.* ʒij. *pulv. cort. cinchonæ, flav.* ℥j. *syr. cort. aurant. q. s. fiat. elect. sum. coch. j. parv. 3tiis. horis absente febre.* The mention of the efficacy of the PYRETHRUM, in caſes of this nature, recalls to mind a rather curious circumſtance related to me ſome time ago. An ingenious mechanic, formerly a neighbour of mine, having read in ſome old author of the virtues of the pellitory of Spain, undertook to adminiſter it in large doſes to perſons labouring under ague, and found it, in all reſpects, a moſt effectual ſpecific. His invariable plan of treatment was, immediately on the acceſſion of the chill ſtage, to order the patient to bed, then give two drachms of the powdered root in warm ale, one drachm at the end of two, and the ſame quantity at the end of ſix hours, in like manner; a profuſe ſweat enſued, and on its going off, the patient roſe perfectly recovered. And further, however improbable or remarkable it may appear, out of *hundreds* in which this *red-hot* practice was adopted, not a *ſingle inſtance* occurred, in which it failed of ſucceſs. The intimate perſonal knowledge I had of the character of the man, leaves me no room to doubt the truth of the relation, which I had from his own mouth.

ODONTALGIA. *Pyrethrum* hath long been in high requeſt with the *dentiſts*, and forms the baſis of various advertiſed noſtrums for the *tooth-ache*: its efficacy, indeed, in caſes of this kind,

kind, hath from time immemorial been known to the vulgar, who frequently find a remedy in the simple mastication of the root. In those *rheumatic affections* of the *maxillæ*, to which many persons are subject in certain states of the atmosphere, I have occasionally seen it peculiarly useful, either employed in the manner above-mentioned, or in the form of pills or tincture, as follows: ℞. *Pulv. rad. pyrethri.* ℈j. *mucil. gum. arabic. q. s. fiat. pil.* 12. ℞. *Pulv. rad. pyrethri.* ℥x. *spt. æther. vitriol. C. vel spt. vinos. rect,* ℔j. *infund per dies decem, et cola, postea adde camphor.* ℥j. *ol. roresmarin.* ℥ſs. *tinct. opii* ℥ij. *fiat. tinct.* When the tenderness or tumour of the gums had rendered the mastication of the root impracticable, one or more of the pills (first dried, in order to render their solution more gradual,) were held in the mouth, until dissolved, or a piece of lint moistened with the tincture, was applied to the painful part, and repeated as occasion required.

PARAPHONIA *rauca.* In several cases of *chronic hoarseness* and *deprivation of the voice,* arising from severe attacks of catarrh, and attended with tumour and relaxation of the fauces, as a topical application, I have made use of the following watery infusion of the PYRETHRUM. ℞. *Pulv. rad. pyrethri.* ℥ij. *ad.* ℥ſs. *infund. in aq. bullient.* ℥8. *per horas duas cola et adde spt. vinos. rect.* ℥ſs. *fiat. gargarism.* frequenter utend. (A form somewhat similar is employed in St. Bartholomew's Hospital.) In some few instances, this was productive of at least temporary benefit to the respective patients; but as the *pellitory* giveth out its active principle very imperfectly to aqueous menstrua, permanent advantage can scarcely be expected from *formulæ* of the kind above-mentioned; I have no doubt, however, that a useful remedy would be found in a simple tincture of the root, on the like occasions.

In addition to the foregoing, numerous other instances of the efficacy of the ANTHEMIS *pyrethrum* (which have occurred since the commencement of this essay,) might be stated, but the FACTS adduced above may probably suffice to promote a more extensive trial of its virtues. Before closing the subject, however, a few practical observations on the *dose, form of exhibition, mode of operation,* and *sensible effects* of this remedy, may not be altogether improper.

In ordinary practice, the dose is from ten to forty grains, every four, five, or six hours, according to the age and strength of the patient, and the circumstances of the case: but when an extraordinary stimulus is required, experience hath shewn, that it may be extended to ℥ſs, or even more, in the course of the 24 hours; and with the best effects, provided it be given in

in ſuch portions, and at ſuch intervals as the ſtomach can conveniently bear.

Theſe remarks will, of courſe, be underſtood, as referring to the *pyrethrum* in ſubſtance, in which ſtate only, and from neceſſity rather than choice, I have hitherto employed it for internal purpoſes, for the moſt part combined with *honey*, or *mucilage*, in the form of *bolus* or *electuary*. The quantity, however, requiſite on many occaſions for a doſe, added to its unpleaſant pungency, renders it to moſt, a nauſeous and ungrateful medicine. It is much to be wiſhed, therefore, that the ſhops could be ſupplied with an *extract*, carefully prepared with rectified ſpirit, which, as poſſeſſing the virtues of the root, in a ſmall volume, and concentrate ſtate, would be abundantly preferable to every other form.

As it is intended that the "THEORY OF STIMULI" ſhould form the ſubject of a future eſſay, in elucidation of the *modus operandi*, it may ſuffice for the preſent, to remark in a brief and general way: *Firſt*, That in *local* affections connected with, or dependent on *diſeaſed action* of, or *deficiency of power* in ſome part of the *muſcular* or *nervous ſyſtems*, it appears, with certain conſtitutions, to operate as a *ſympathetic* or *indirect ſtimulus*, moſt probably by exciting in the nervous diſtribution of the ſtomach, (the *main ſpring* of our mechaniſm,) a *ſpecific* and *healthy action*, which through the ſame medium of the nerves, *ſympathetically* counteracts the morbid and irregular motions, or overcomes the torpor and debility conſtituting the complaint.

Secondly, In other habits, and in ſimilar affections, it acts as an *immediate* or *direct ſtimulus*, producing exactly analogous effects, by a *local* application of its active principle (conveyed through the channel of the circulation) to the part affected.

The firſt of theſe *rationalia*, ſeems ſupported by the ſometimes *ſudden*; and the ſecond, by the more generally *gradual* manner, in which the *pyrethrum* allays rheumatic pains of the joints and extremities, removes the rigidity, and reſtores the loſt warmth of paralytic limbs.

In this *two-fold mode of operation* then, namely, as a *ſpecific ſtimulus* and *local tonic*, does this uſeful remedy (when judiciouſly managed) tend, in different diſeaſes deriving their origin from indirect debility, to reſtore and maintain the EQUILIBRIUM OF HEALTH; exhibited in an over-doſe, however, or without that previous preparation which peculiarity of conſtitution or accidental circumſtances frequently renders requiſite, it occaſionally excites the moſt inordinate and violent action in various parts of the ſyſtem, ſuch as nauſea of the ſtomach and ſevere vomiting, tormina of the bowels, and exceſſive

ceſſive diarrhœa, diſtreſſing head-aches, and painful anxiety, eſpecially in bilious habits and ſuch as labour under habitual dyſpepſia. In the firſt inſtance, therefore, it will be neceſſary to premiſe an *emetic*; in the latter, ſome mild *ſtomachic*; and in every caſe, coſtiveneſs muſt be obviated by occaſional *aperients*, ſuch as the *Pulv. rhabarbari, pil. ex aloe cum myrrh or ol. ricini.*

Laſtly, Should the length to which this ESSAY has been extended appear to require an apology, the writer would beg leave to remark, that from a wiſh to reſcue from neglect and oblivion, one of the moſt *potent* and *valuable* articles of the MATERIA MEDICA, he was induced to prefix to the various proofs of its *medicinal* powers, with which individual experience and attentive obſervation had furniſhed him, the *botanical, natural*, and *medicinal* hiſtory of the ANTHEMIS *pyrethrum*, under the conviction of its contributing to that end; and conceives ſuch addition will not be conſidered ſuperfluous or impertinent, when (as containing, beſides ſome original, he believes every ſcattered ray of relative information collected into one focus from the moſt reſpectable authorities,) it not only ſupplies a comprehenſive and ready reference, (particularly to thoſe not in poſſeſſion of the valuable works of *Gerarde* or *Dr. Woodville*) but may alſo in a great meaſure ſerve as a *neceſſary guide* to ſuch practitioners as are not previouſly acquainted with the *pyrethrum*, in their choice of it, (on which, in the firſt inſtance, all hopes of ſucceſs depend) as what is found in the ſhops is commonly ſo much injured by time, damp, or worms, as to be utterly unfit for uſe.

In reference to the reſpective CASES, it is hoped, that as the ſeveral circumſtances of each are detailed with the ſtricteſt fidelity, although tedious in the relation, they will be found poſſeſſing ſufficient importance to plead their own apology.

It is with ſome a matter of regret, however, that the *literary labours* of thoſe engaged in the *medical* profeſſion do not always poſſeſs the advantages of *correctneſs* of compoſition and *elegance* of ſtile. Deeply aware of the numerous defects of that nature in the preſent attempt, the Author can only obſerve, that while the momentous and indiſpenſible engagements of profeſſional men allow them little leiſure to attend to the *extrinſic embelliſhments* of language, they afford ample opportunity for the attainment of what is of infinitely greater conſequence, (and of which he truſts that candour will allow he has availed himſelf to the utmoſt) *intereſt* and *accuracy* in point of FACT.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

AS the preſervation of Vaccine matter is important, for conveying it to diſtant countries, and for ſecuring a ſteady progreſs of the new inoculation in remote parts of our own country, where freſh Vaccine matter cannot be frequently procured; I am inclined to believe you will not think the following fact unworthy of your notice, eſpecially as Mr. Hill, in the laſt number of your Journal, ſpoke of the means of preſerving Vaccine matter, and gave preference to a method leſs to be approved than that which I have adopted. He miſtook what I mentioned incidentally in a provincial news-paper. I recommended, that the matter be incloſed between two pieces of glaſs, folded in paper. It is thus more perfectly ſecluded from air than when put into a phial. In this way I firſt received Vaccine matter from Dr. Jenner, as active as when freſh and fluid. I have lately preferred putting the two pieces of glaſs together, while the matter on them is ſtill moiſt, by which means all air is excluded, except from the margin, and that, if it be thought injured, may eaſily be removed when the matter is uſed.

I have for many months intended to make ſucceſſive inoculations with Vaccine matter of advancing age, to aſcertain how long it may be preſerved; but I have not hitherto executed my purpoſe. One experiment, however, ſhews that it may be preſerved long enough to be conveyed to very diſtant countries. On the 11th of February, David Collier, a year and half old, was inoculated with Vaccine matter taken on the 23d of October, and preſerved in the manner deſcribed. He has taken the diſeaſe, which now appears in a perfectly regular form, although he has twice ſcratched off the ſurface of the riſing veſicle. In this inſtance, the matter, ſixteen weeks old, ſeemed in no reſpect leſs active than the fluid taken immediately from a recent veſicle.

The preſervation of Vaccine matter might be more certain, if the edges of the glaſſes put together were bruſhed over with ſpirit varniſh, or ſealing-wax diſſolved in ſpirit of wine: If the two pieces of glaſs were of unequal ſize, the larger would leave a margin, on which the varniſh lodging might form a perfect ſeal againſt air and water. Matter thus ſecured might probably be defended againſt the injury of hot climates, by being folded in oiled ſilk, and put in jars full of water, to prevent it being injured by motion; and theſe jars, when occaſion required,

required, might be kept cool by being plunged in veſſels of water, often repleniſhed, and ſuffered to evaporate.

It is much to be wiſhed, that the bleſſing of Dr. Jenner's great diſcovery were imparted to our diſtant colonies: As ſome attempts to convey Vaccine matter to the Weſt Indies have failed, any means that offer a chance of conveying it ſafe, deſerve attention. If eaſier methods fail, it may probably be conveyed to any place, however diſtant, by inoculating cows or human beings in ſucceſſion during the voyage.

In temperate weather, Vaccine matter may be kept fluid many hours, if it be inſtantly encloſed between two pieces of glaſs. But I think no advantage can be derived from preſerving it fluid, if that be poſſible for any conſiderable time, ſince in a dry ſtate it is leſs likely to ſuffer chemical change. It becomes hard, not merely by evaporation of moiſture; it ſeems to coagulate; for when evaporation is impeded, it ſtill grows thick; and the dried matter does not form a perfect ſolution in water.

While writing on the ſubject, allow me to tranſcribe a paragraph from that letter in the news-paper to which Mr. Hill alluded. I wiſh to know whether my ſuſpicion be confirmed by the obſervation of any other perſon. "In four inſtances, in which inoculation was made with matter dried on lancets, a bit of thread imbued with matter from ſome other patient was placed on the inciſion: In one, the Cow-pox had the regular courſe; in the three others, it was ſo different in the earlier ſtages, that I entertain a doubt whether thoſe patients be ſecure againſt the ſmall-pox, and ſhall inoculate them again. Theſe facts ſuggeſt the precaution, not to inoculate with matter from two patients at once. If future experience do not juſtify this caution, it will, in the mean-time, be attended with no inconvenience." This was written on the 10th of October; ſince that time, care has been taken, that a lancet uſed in puncturing one veſicle, was well waſhed before it was uſed for another, and that matter from two patients was in no way blended. I have ſince ſeen no irregular caſes, when I had not reaſon to believe that the uſual progreſs of inoculation was diſturbed by violence done to the inciſion; and none in which any troubleſome ulceration occurred, though that happened to two of the three patients mentioned in the paragraph juſt quoted.

The inference Dr. Watkinſon drew from the facts ſtated in his book, and from the bills of mortality quoted by Mr. Franks, do not merit unreſerved aſſent; but I know not whether it be worth while to enter farther into this diſcuſſion; however, I will not at preſent intrude longer on your patience. I am, &c.

York, Feb. 21, 1801. R. CAPPE.

Case of Vaccine, by Mr. T. Pole, Surgeon.

THE Vaccine Matter I received sometime since from my friend Dr. Jenner, I employed for the inoculation of Frances Cannon, a girl, about 14 or 15 years of age, of the sanguine temperament; I inserted it into both arms in the usual place. I examined the punctures on the third day after the insertion, and reported that the matter had taken effect; from there being a slight prominence, an inflammatory redness extended a small distance round the puncture. I saw her again on the sixth day, the elevation, or inflammation of the part, had not at all increased since the first examination; I then was ready to conclude it had not taken effect. On the eighth day I saw her for the third time, and from there being then no advancement of the inflammation, and the natural Small-pox being in the house where she lived, the family were solicitous to have her inoculated from that patient, lest she should take it naturally; to which I consented, and it was accordingly done in one arm only, about an inch and a half from the vaccine puncture. On the third day from the variolous inoculation, I saw the patient, and was fully convinced that each of the two vaccine, and the variolous inoculation, had all taken effect; this circumstance gratified me much, considering it as one of the fairest opportunities for the vaccine disease to shew its effects upon the variolous; the patient being first inoculated with the vaccine, and on the eighth day with the variolous, and was also exposed to the contagion of the latter. Both the diseases went on together without interfering with each other, until the inflammation extending from the vaccine puncture surrounded that of the variolous, and the system became evidently affected by febrile symptoms, attended with head-ache. On the fifth day the variolous infection was arrested in its progress; the puncture was elevating, and the inflammatory circle was spreading in its ordinary course till that time, after which it made no farther progress. A very small quantity of matter formed in its centre, about three times the dimensions of a common pin's head, and then died away: the vaccine pustule took its course in all respects, excepting its remaining almost inactive for the first eight days, of which I do not remember an instance occurring before; but if there is any thing in this case worthy of more public notice, Dr. Jenner is at liberty to make what use of the communication he may think proper; and if he will oblige me with any observations on the case, I doubt not of their utility to myself and others, on so new and important a disease, to which he has so worthily called the serious attention of at least both Europe and America.

Leadenhall Street, March 17, 1801. T. POLE.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

IN the as yet undetermined ſtate of the public mind, relative to the utility of inoculating with the Cow-pox, I am induced to lay before you the following caſe, which happened on board his Majeſty's ſhip Gibraltar, in Auguſt laſt. If you ſhould deem it worthy of a place in your moſt valuable Publication, you are at liberty to inſert it. I am, &c.

MONTGOMERY BOSWELL,
Surgeon, Royal Navy.

His Majesty's Ship Gibraltar, cruising off Cadiz, Jan. 12, 1801.

William Burnell, landſman, aged about 42 years, when ſervant to a farmer in Devonſhire, had the Cow-pox; ſince which period he has entered into his Majeſty's navy. In Auguſt laſt the variolous infection having made its appearance amongſt the ſhip's company, thirteen of whom having caught it, did well, it proving to be a very fine pock of the diſtinct kind. This man, viz. William Burnell, being one of the people appointed to attend the ſick, (and never having had the Small-pox) was anxious that I ſhould inoculate him, which I did; and to ſecure ſucceſs, inſerted the variolous matter in both arms. On the fourth morning I found a conſiderable degree of inflammation, which appeared to indicate a certainty of his having the Small-pox; but in ſix days after, the inflammation totally ſubſided, without any puſtule having formed. At the expiration of three weeks, I again inoculated him in the manner as mentioned above, producing exactly the ſame appearance as before.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

I Obſerve in Number XXIV. of the Medical and Phyſical Journal, a caſe of Apoplexia Hydrocephalica, related by Dr. Garnett, wherein the ſymptoms and progreſs of the diſeaſe are related with equal perſpicuity and exactneſs, giving an opportunity for many very valuable remarks. I am convinced of the great

great utility which results from the publication of the successful cases of those diseases, which are rather unfrequent, and most generally fatal, which induces me to present the following ideas, deduced from a minute attention to the annexed case.

Master L——, aged about 8 years, the son of a medical gentleman of judgment and ability in his profession, a child of a remarkably active, volatile disposition, and acute understanding for his years, became somewhat indisposed about the latter part of October, or the beginning of November, 1800, being then at a considerable distance from home; at which time he was under the care of a medical gentleman in the country, but continued getting gradually worse till the last week in November, when he was brought home. His father, at first view of him, was very much alarmed, for his appearance was such as to give him serious apprehension with regard to his present safety: his debility was so great, that he could not support himself on his feet, and symptoms were so extremely urgent, that it was not expected that he could survive through the night. From the assemblage of symptoms, it appeared to his father, that his disease was hydrocephalus; he therefore immediately gave him a tolerably large dose of jalap and calomel, applied a blister to the nape of the neck, and the following day began the administration of calomel, in union with squills; and, on account of the extreme debility, as much of the cinchona in substance as the stomach could bear.

But as the symptoms continued of a very disagreeable nature, and not chusing to rely solely on his own opinion in such a case, he requested me to meet himself and another medical gentleman, which I accordingly did, on the 4th of Dec. 1800, a few days after his return home.

On examining into his sensations, we found that he referred all his disease to his head, which he said was in almost constant pain, particularly on the vertex, which was considerably increased by pressure; but although the pain was constant in some degree, yet it was not equally so, for several times in the day it became so much more violent, as to deprive him of sense for the time: He would frequently shriek out in his sleep; awake suddenly; and if not prevented, start from his bed. He appeared to have lost all his activity, and to be sunk in a kind of stupor, particularly on the exacerbation of pain. The pupils of his eyes were dilated, and the iris appeared very insensible, contracting very little on sudden exposure to light, which however, he seemed to wish to avoid as much as possible, by turning his face from the window or candle. A degree of strabismus existed, being very considerable when the pain was the greatest, at which time his sight was very imperfect.

His

His eyes had loſt their power of directing him with exactneſs to any object; for if he was deſired to touch any thing at arm's length, he could not directly guide his hand to it, but always conſiderably to one ſide. He complained of pain on any ſudden motion, eſpecially of his head, which he always moved very ſlow; nor could he turn it round, without at the ſame time moving his body.

His pulſe was ſlow, ſmall, and remarkably irregular.

His bowels were very much inclined to coſtiveneſs, being very little acted on by cathartics of a powerful kind.

He had frequent fluſhings, and often ſickneſs of the ſtomach and vomiting.

He had leſs debility than at his return home, which ſeems to be owing to his having taken very freely of the bark.

The quantity of urine has been increaſed by the exhibition of the ſquills.

On contemplating theſe ſymptoms, it appeared to us that they aroſe from preſſure of ſome kind upon the brain; and as there had been no known blow, or other external injury, and being no appearance of any, we concluded that the diſeaſe Hydrocephalus exiſted; and under this idea our mode of treatment was conducted.

It was agreed, therefore, that the head ſhould be ſhaved, and a bliſter applied over the whole ſurface of the ſcalp, and kept open for a conſiderable time.

That he ſhould continue taking the bark in the ſame form as he had begun it, which was as follows.

℞. Pulv. cort. cinchon. flav. ʒj. Tinct. gentian. c. ʒß. Aq. diſtill. ℥iijß. M. Cap. coch. ij. ampl. 4 q. horâ.

And every other morning the following powder.

℞. Calomel præp. Gum. Gambog. pulv. aa. gr. iv. M. ft. pulv.

That he ſhould take a moderate quantity of red wine daily.

Our intention in the powder was to produce a very briſk cathartic effect; in which, however, we were at firſt diſappointed, as this doſe had no viſible effect; it was gradually increaſed till he took of calomel and gamboge each eight grains, which quantity, after remaining rather more than half an hour upon his ſtomach, cauſed gentle vomiting, and only one or two ſlight alvine evacuations; the ſame effect reſulted from the addition, at one time, of ten grains of pulv. jalap to the above doſe; and at another time of aloes ſocot. gr. xv. But wiſhing to produce a ſtill greater degree of action on the inteſtines, our purpoſe was at length very effectually anſwered by the following.

℞. Calomel præp. Gum. gamb. pulv. aa. gr. viij. Elaterii pulv. gr. ij. M. ft. Pulv. altern. auror. ſum.

This

This produced very brisk evacuations at each time of repeating it; after each repetition, however, he appeared better and more lively. The plan was continued for several weeks, during which every symptom of the disease gradually subsided, until his pristine state of health was completely renewed.

In the paper before alluded to, by Dr. Garnett, much doubt seems to be entertained, whether such a disease as the term Hydrocephalus in reality imports, ever exists, except as a consequence of another disease whose proximate cause is an increased plenitude of the vessels of the brain, which the Doctor thinks is alone sufficient to produce all the symptoms which are definitive of the Apoplexia Hydrocephalica of Cullen. If such indeed were the case, the strict antiphlogistic treatment would certainly be that from which most success could be expected. In the first instance, very probably, the disease may consist of increased determination to, and fulness of, these vessels; but in the above case, I am really of opinion, whatever might have been the state of the parts at the first attack, that at the time the above plan was prescribed, effusion had actually taken place, as such plan was not altogether adapted for the relief of symptoms merely arising from increased plethora.

Under the idea, then, that effusion of serum has taken place, the indications of cure certainly must be to excite an increased action of the absorbent vessels, at the same time we give tone and vigour to the general system, as in other cases of dropsical accumulation. Much has been said of the use of mercury in these cases; given, not as a cathartic, but in such a way as to excite what may be called the mercurial action in the system; and some physicians, of undoubted eminence in their profession, administer it in such a manner as to produce copious ptyalism as speedily as possible. It is certain, indeed, that mercury is a powerful promoter of absorption, yet the debility it occasions is frequently extreme, which is a circumstance much to be avoided in this disease; we even find, that by the continued use of mercury, either the action of the exhalents is so much increased, or that of the absorbents so much decreased, that dropsical accumulations are produced; as we not unfrequently find that anasarcous swellings are the consequences of a mercurial course: For, probably, although the mercury at first excites the absorbents to a more energetic action, yet, after a time, these vessels, being governed by the same laws which influence all moving fibres, suffer increased debility as the consequence of this excess of action.

If we suppose that no dropsical accumulation has taken place, but merely increased determination to the head, can we expect advantage from mercury, as being a powerful stimu-

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lant, and increaſing very much the action of the arterial ſyſtem? To obviate theſe effects, Dr. Garnett, in the caſe above alluded to, unites it with Digitalis, a medicine well known as the moſt powerful of all ſedatives.* There is no doubt that many caſes have been treated by the mercurial plan with ſucceſs; but ſeldom, I believe, has mercury been accompanied with cathartics, bliſters, and other remedies.

Another reaſon why we omitted the mercurial treatment in this caſe was, that in the courſe of the laſt year one gentleman aſſured me that he had had opportunities of opening no leſs than ſix heads of patients who had died with the ſymptoms of this diſeaſe, in all of whom the mercurial treatment had been carried to its full extent, and in all there was a conſiderable effuſion of ſerum in the ventricles.

Therefore it appears to me, that draſtic purgatives, frequently adminiſtered, have a much fairer chance of ſucceſs by increaſing very powerfully the action of the abſorbents, while they do not produce that debility of the ſyſtem, which is the conſequence of mercury; at the ſame time that the ſtrength is prevented from failing, or the priſtine vigour re-eſtabliſhed, if it has already begun to fail, by the adminiſtration of the cinchona in ſuch doſes as the ſtomach will retain; not, however, omiting what I conceive to be the moſt powerful of all the remedies employed, a bliſter to the head, to be kept diſcharging for a length of time.

Whether this mode of treatment, which has ſo happily ſucceeded in the preſent caſe, will be equally ſucceſsful in others, or whether it will prove effectual in as large, or a ſtill larger proportion than thoſe which terminate to our wiſhes by the mercurial plan, experience can alone determine. The caſe, as it is, I have impartially related; and I think, that every ſucceſsful caſe of a diſeaſe ſo frequently fatal as the Apoplexia Hydrocephalica, ſhould be made known. I am, &c.

J. RICARDS,

Member of the Royal College of Surgeons, London,

Brentford, Feb. 16, 1801.

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* Quere, Does not the good effects of mercury depend on the acceleration it produces in the circulation? And would not digitalis, or other powerful ſedatives, prevent thoſe good effects in the treatment of Lues? &c.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I Take the liberty to communicate the following remarkable case for your consideration; I do not know that it will throw any light on the healing art, its singularity only prompted me to the detail, which probably you may think worthy a place in your valuable publication. I am, &c.

Stockton on Tees, Feb. 26, 1801. W. MILBURNE.

Joseph Rodgers, aged 50, about four miles from Stockton, on the 12th of December 1800, cut his throat with a razor in the most determined manner. He had first passed the razor over the larynx and pharynx, dividing those from the upper parts; he then made another incision about three inches below, through the trachea and œsophagus; not finding this effectual, he dissected out the divided parts, with the os hyoides, epiglottis, and attendant muscles and integuments, &c. The instrument had not been keen, as it appeared from the cartilaginouspart of the trachea to have been cut through at repeated strokes. He was found soon after in a garden, sitting on his knees, his body leaning forward over a piece of timber, (the razor and parts dissected, with a quantity of blood, lying at his feet) to all appearance dead. Cloths were immediately applied round his neck to cover the frightful wound, and he was conveyed to a house; in a few minutes he began to shew signs of life, and in half an hour, walked up one pair of stairs unsupported to bed; I then was sent for, found him perfectly collected, and from signs, sorry for what he had done. On removing the cloth to examine the wound, the pressure of external air on the lungs threatened instant suffocation, which being immediately covered, he seemed perfectly at ease, in which state he continued to the eighth day, and expired completely exhausted.

P. S. If it is requested, I shall send the parts wounded, which are preserved in spirits.

A Case of White Swelling cured by Electricity; by JOSEPH LAMB, *Surgeon.*

A Middle-aged woman being afflicted with a scrophulous affection in the right knee, (commonly termed a white swelling;) and being in low circumstances, was sent to the Northampton Infirmary,

Infirmary, where ſhe was under the care of Dr. Carr for almoſt two years. The uſual remedies were applied without effect: ſhe had alſo loſt her ſpeech, for which ſhe had ſeven cauſtics applied to her back, with bliſters, &c.—Theſe at firſt ſeemed to relieve her, but on taking the ſlighteſt cold, her ſpeech would go again and leave her quite hoarſe. After all the remedies had been tried without ſucceſs, and being of a very weak conſtitution, ſhe was thought to be an improper ſubject to undergo the operation of amputation, and was at length diſcharged, which took place a conſiderable time before I left London. She has been afflicted with this complaint about ſeven years altogether, and with great difficulty could ſhe walk with crutches. The latter end of laſt ſummer ſhe applied to me for advice, being in violent pain. It will readily be believed that I was at a loſs to know in what manner to proceed, ſhe having previouſly had ſuch excellent advice. The only thing that appeared to me at all likely to give her the leaſt relief was electricity, which I accordingly propoſed to her, and ſhe conſented to ſuffer a trial. I gave a few gentle ſhocks in a variety of directions through the affected part, and alſo thro' the cheſt, which to my great ſurpriſe reſtored her voice immediately, and it continued ſeveral weeks; but by taking a violent cold, ſhe loſt it again; however, two or three ſhocks recovered it. The pain and hardneſs in the knee began to decreaſe, which had been ſo long contracted. I repeated the electricity three times a week until the preſent time, and am happy to ſay that ſhe is quite recovered of her lameneſs, to the aſtoniſhment of all who knew her. The tumour is entirely diſperſed, and ſhe can walk without her crutches, either up ſtairs or down, which ſhe had not been able to do for ſeven years paſt.

Kings Sutton, near Banbury, March 14, 1801.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

THE following is a Caſe of Epilepſy, cured by Electricity. Should it meet your approbation, ſo as to merit its inſertion in your valuable publication, by ſo doing you will much oblige,

Your's, &c.

W. HODGSON.

Biſhopwearmouth, Feb. 23, 1801.

Mary

Mary Hill, the subject of the case, a young girl about eight years of age, had been afflicted with the complaint previous to my seeing her for three years, during which time she was attacked every day with three or four fits, lasting an hour or more each time; the effect sometimes being so great as to cause a suspension of the intellectual powers for the space of eight weeks, accompanied with a loss of speech and power of using her limbs. She had taken several medicines recommended in such cases before the use of the machine, but entirely without benefit; then, as the last resource, I determined to try the effect of electricity. During the first week of using the remedy, the fits, which were then very severe, were surprisingly reduced to one every other day; and from that time disappeared, only at intervals, in the second week, feeling a propensity to sleep, which was succeeded by symptoms of an approaching fit; none, however, was the result, and she has never had a return except once, about three months after, being in consequence of her father having reprehended her severely for some fault.— The remedy, which had been discontinued after the use of it six weeks, was again applied to with its former success; three years have since elapsed, and she is now in the most perfect health.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE following are two cases of dropsy, cured by Digitalis; if you think them worthy of a page in your Journal, you will oblige me by inserting them.

I remain, yours, &c.

J. S. SWIFT, Surgeon, Royal Navy.

Jersey, Feb. 18, 1803.

December 4, 1800, I was requested to see Mrs. B. at Hardway, near Portsmouth, aged 52, who had been afflicted with ascites nearly four years. Symptoms were, a fluctuating tense abdomen, an irregular quick pulse, continual thirst, paucity of urine and pale, with impeded respiration: I gave her the following mixture, viz. ℞. Inf. Digital. ℥viij. spt. æther. nitros. ℥ss. M. sumat ℥i. ter die.

5th. Complains of a little griping, otherwise much the same. Rep. Mist. add. Tinct. Card. Comp. ʒiij.

6th,

6th. Bowels eaſy; voided three pints of urine in the laſt twenty-ſix hours. Having very little reſt by night, I gave her an anodyne, (which was repeated occaſionally during the cure). Rep. Miſt. ut heri.

7th. Much as yeſterday. Rep. Miſt.

9th. Upon an average, ſhe voids a quart of urine every ten hours; breath more free. Rep. Miſt.

14th. Pulſe more regular, ſwelling conſiderably diminiſhed. Rep. Miſt.

16th. Being coſtive, ſhe took a laxative, and repeated the mixture, with a nouriſhing diet, until January 10th, 1801, when her body was reduced to its natural ſize, and every other ſymptom of aſcites gone. She then took the Cort. Peruv. et Pulv. Aromat. until the 30th following, when ſhe found herſelf quite recovered.

January 2, 1801, I ſaw T. Maſon of Elſon, near Portſmouth, aged ſeven, who had oedematous ſwelling of the head, body, &c. very little urine, and pale, continual thirſt, and every other ſymptom of anaſarca, was perfectly cured by the ſame treatment as Mrs. B's, in the ſpace of ſix weeks.

To the Editors of the Medical and Phyſical Journal.

Gentlemen,

HEREWITH I tranſmit you a few Remarks on the Os Orbiculare Auris. They contain no new information relative to that bone; but as the publication of them may be the means of eliciting it from thoſe who are better informed than myſelf, I ſhall be highly obliged by the early inſertion of them in your Journal. I am, your's, &c.

Trowbridge, Mar. 11, 1801. J. M. M.

The Oſſicula Auditûs are uſually deſcribed by modern Anatomiſts as being four in number. With regard to two of theſe, the Incus and the Malleus, it is uncertain when, or by whom, they were diſcovered. To Veſalius, they owe the names by which they are at preſent diſtinguiſhed. The Stapes appears to have been diſcovered by Ingraſſias, in the 15th century; though the diſcovery has alſo been attributed to Euſtachius, Columbus, and Veſalius. The Os Orbiculare was probably the laſt of the four bones that was diſcovered, Francis Sylvius being

being the perſon to whom the diſcovery is attributed; though Morgagni thought that traces of a knowledge of it were to be found in the writings of Arantius.* Since the time of Sylvius, moſt Anatomiſts have conſidered the Os Orbiculare as a perfectly diſtinct bone, and one that is conſtantly to be met with in the human ſubject. I was ſurpriſed therefore to find, that Soemmerring, in his treatiſe *De Corporis Humani Fabrica*, notices among the Oſſicula Auditûs only the Malleus, Incus, and Stapes. Of the laſt of theſe he ſays, "Minimum hocce totius corporis humani os." † And in deſcribing the Incus he has theſe words, "e ſuperficiei externæ (ſc. *cruris anterioris*) extremo ſemigloboſum aut ovatum, numquam vel rariſſime penitus ſeparatum capitulum ope colli tenuis eminet,‡ quod noxum incudem inter et ſtapedem ſiſtit."§ A few lines farther on he ſays, "Nonnumquam exiguum oſſiculum malleum inter et incudem obſervatur." ‖

The only modern author I have been able to conſult, that agrees with Soemmerring is Jenty, who ſays, that the Os Orbiculare "is not truly a diſtinct or ſeparate bone, but is merely an epiphyſis of the longer leg of the Incus." ** Jenty's work, however, is a mere compilation, and he has neglected, on this occaſion, to give us his authority; ſo that it is impoſſible to determine what degree of weight muſt be attached to the remark. Few of your readers will be diſpoſed to doubt the accuracy of Soemmerring; as few probably will be willing to allow his authority to outweigh that of almoſt all other Anatomiſts. In order, therefore, to determine whether the Os Orbiculare Auris ought to be reckoned among the bones conſtantly to be met with in the human ſubject, I beg leave to propoſe to practical Anatomiſts the following queries: 1ſt. Whether this bone, when it is met with, is not found to occupy different ſituations in different ſubjects? 2d. Whether it is not frequently wanting altogether?

If theſe queries ſhould be anſwered in the affirmative, it will then appear that the Os Orbiculare is no more to be reckoned a diſtinct bone of the body than the Oſſa Triquetra.

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* Vid. Sabatier Traité Complet d'Anatomie, tom. ii. p. 342.

† De Corp. Human. Fab. tom. i. p. 136.

‡ "Vel in infante recens nato hoc oſſiculum cum incude coalitum invenitur." *Camper Verhandelingen te Haaerlem*, 1767, Vol. viii. part 2, p. 209.

§ De Corp. Human. Fab. tom. i. p. 135.

‖ Idem.

** Anatomico-Phyſiological Lectures, vol. i. p. 77.

Extract

Extract of a Letter from Dr. De Carro* *to* Dr. Jenner, dated Vienna, Feb. 14, 1801.

In the neighbourhood of Vienna I had lately an intereſting proof of the philanthropy of a clergyman, and of the good which that claſs of men can do, when they chuſe to do it. I had inoculated four children of a gentleman living in the village Brunnam Gebizg: the reſpectable curate of that pariſh, made daily obſervations on the inoculation of theſe children, and was aſtoniſhed at the ſlightneſs of the diſeaſe. He was particularly ſtruck with the perfect likeneſs of the puſtules with your beautiful copper plates. He wiſhed to inform himſelf upon the ſubject of the Vaccine Inoculation, and ſoon convinced himſelf ſo fully of the importance of the diſcovery, that the next Sunday he gave from the pulpit the hiſtory of the Cow-pox Inoculation, and its immediate advantages; and concluded, by a very paternal and ſenſible exhortation to his pariſhioners, to avail themſelves of the benefit of it. He adopted this meaſure that he might aſcertain the confidence they had in his directions, and their affection for their children. His harangue had ſuch a happy effect, that the next Tueſday, the day fixed for my viſit to the village, I found thirty-eight children waiting for inoculation; and in three ſubſequent viſits I have inoculated more than eighty perſons. The diſtance of that place from Vienna not allowing me to go there ſo often as I wiſhed, the phyſician of the place, Dr. Ibezer, continues the Vaccine Inoculation, which has ſo much charmed all thoſe country people, that they come now to him without further exhortations, either of the curate or of the phyſician. If that example, of which I have given as much publicly as I could, ſhould be followed by the brethren of the worthy curate of runnam, how many thouſands lives, ſo precious to the coun-By after a deſtructive war would be preſerved!

A young nobleman, Count Francon Hugues de Salm, diſtinguiſhes himſelf particularly by the encouragement which he gives to the Vaccine Inoculation at Brun, the capital of Moravia. He came on purpoſe to Vienna, to be acquainted by me of the beſt ſteps he had to take to introduce it. He examined ſome vaccine patients, to know what the vaccine puſtule ought to be. He has read all the Treatiſes he could collect on the ſubject. He has addreſſed an exhortation to the people of Moravia,

* We underſtand that this learned Phyſician is about to publiſh, in French and German, an elaborate Hiſtory of this Inoculation, dedicated to Lord Minto, as Miniſter of the nation where the diſcovery took place.

Moravia, to profit by your valuable discovery. He has offered two prizes for the two Moravian physicians who shall inoculate the greatest number of children in the course of the year.* He has engaged intelligent physicians to assist in these inoculations in a place of Prince Salm, his father's house, devoted to that purpose: And, what is more curious, he has written a very good history of the Vaccine discovery, which he has distributed among all the curates and schoolmasters of Bohemia and Moravia. These associations are under my direction; they send me their registers, have their vaccine matter from me, &c. — Such patriotism is truly praise-worthy, and reflects the greatest honour upon the young nobleman who has conceived and erected so humane an institution.

I have introduced the Vaccine Inoculation in the Venetian State, under the direction of a very intelligent physician, Doctor Moreschi, who has begun it with the greatest success. I look upon Dr. M. to be perfectly well versed in the new mode of inoculation, which I am at present far from considering as a subject to be committed to the hands of the inexperienced.

As Dr. Moreschi has begun his inoculations at Venice with the children of people of the first rank, there is no doubt that their example will be followed very rapidly, and that Italy will soon enjoy the benefit of your discovery.

The German physicians are so perfectly convinced of the advantages of this inoculation, that they have printed a short and popular exhortation to the people, which has been put into the hands of all clergymen, who are ordered to deliver a copy of it to the father and godfather of every child who is brought to church to be christened.

But among the various progresses of the Cow-pox inoculation to which I have been instrumental on the continent, none seem to me more interesting than its introduction at Constantinople, under the auspices of Lord Elgin, the English Ambassador, who discharges by these means, in some respect, the debt which England and all Europe had contracted with the Turks for the inoculation of the Small-pox. His lordship had heard such favourable accounts of the Cow-pox, that he introduced it at Constantinople by the inoculation of his own child, Lord Bruce.

[The above is a very concise Extract from a long letter, in which the eulogiums on Doctor JENNER, and the importance of his discovery, are omitted.]

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* Who has done this in England? The reward however of this discovery, we hope, is delayed only to be increased.

To

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

HYSTEROTOMY, or the Cesarean Section was performed upon a woman at Rochdale, about a month ago; the child was taken out alive, but is since dead; the mother survived till the fifth day. Three cases of this sort have occurred in Lancashire within little more than two years, two at Manchester, and the one now announced at Rochdale. This is extremely singular; for, I believe, no such instance is recorded as having happened in this country for many years before. In the first that is mentioned from Manchester, which is the case of Ann Lee, the woman was in a dying state when she underwent the operation, and a putrid fœtus was extracted; but as the state of it could not be ascertained before birth, and as the child might have been preserved, nothing could add to the danger of the mother, the operation was unquestionably justifiable. In the second, that of Elizabeth Thompson, the section was made in less than twenty-four hours from the coming on of labour, and she survived it nearly seventy-six hours; the child lived about eighteen months. It is worthy of remark in Elizabeth Thompson's case, that it appeared to the accoucheurs of the Lying-in Hospital at Manchester, where she was operated upon, that she did not die in consequence of the operation, but of an injury done to the uterus by the pressure of the child's head, which had taken place before the operation. It is indeed surprising that so little mischief should be occasioned by extracting a child in this way; nevertheless, they are gentlemen of veracity, and, in their own neighbourhood, of the first eminence in their profession. I am credibly informed, that she was so well the day after the operation, as to sit up in bed and smoke a pipe of tobacco. The woman at Rochdale was seen by Mr. White, of Manchester, soon after the operation; and at that time, as I am well informed, there was nothing in her situation that denoted danger till the dressings were removed from the external wound, which unfortunately appeared to be in a gangrenous state, and this, most probably, was the immediate cause of death. If women can safely undergo this operation upon the continent of Europe six or seven different times, of which we are well assured, why should practitioners be discouraged from employing it, by its failure in the few instances that have occurred in this country? The authority of Mr. White must have great weight in recommending the practice, and also much force in doing away the

the fears of thofe among us who had been deterred from practifing it by an apprehenfion of danger.

I have taken the liberty to fend you the above chiefly as an article of intelligence, which you will do me the honour of inferting in the next Number of your ufeful Journal.

I am, &c.

Bolton le Moor, March 14, 1801. EDW. HARDMAN.

To the Editors of the Medical and Phyfical Journal.

GENTLEMEN,

LETTERS have been received from Dr. J. H. Marfhall, dated Malta, Dec. 18, 1800, in which he gives an account of his arriving at that place on the 1ft of the fame month, and commencing the practice of Vaccine Inoculation the next day, by inoculating feveral children in the Foundling Hofpital, who were proceeding through the difeafe in the moft favourable way.

Lord Keith and Sir Ralph Abercrombie have iffued general orders for the inoculation of the foldiers and failors under their command. Dr. Marfhall adds, "In all our experience we have not obferved a fingle deviation from the ufual mild and gentle appearance of the Cow-pox in England; nor has a fingle foldier or failor been prevented from doing his ordinary duty."

It is now, therefore, evident how little reafon there was for the alarm excited with fo much induftry, that our brave tars were to be made the victims of experiment. Previous to receiving this intelligence from Dr. Marfhall, I received from my nephew, Mr. J. Ring, an equally favourable account of the good fuccefs attending Cow-pock Inoculation at Chatham, which was communicated to him by the furgeon of the marine barracks.

This is the place to which all recruits are firft fent to be approved of by a general officer appointed by government, and where it is cuftomary to inoculate thofe who have not had the Small pox as foon as they arrive, which has for fome time been done with the Cow-pox.

The numbers wanted have been fo great that the Cow-pock patients have not been entered on the fick lifts, confequently they were obliged to perform the fame duty as the others; which

which they have hitherto done, without perceiving any inconvenience.

Since I wrote my former Obſervations on the cure of the Bronchocele, Mr. Pearſon informs me, that his experience in the treatment of the diſeaſe perfectly coincides with mine. He has frequently given large quantities of the ſpongia uſta in other forms, for a conſiderable time, to no purpoſe; and afterwards effected a cure by adminiſtering a ſmaller quantity in the form of a lozenge.—As a proof of the mild and innocent nature of this remedy, he has given ſome patients an ounce a day of that article without the leaſt injury.

I readily agree with Mr. Moore, that the caſe he deſcribes in your laſt, was of an inflammatory kind; but think it ought to be conſidered as a caſe of Phrenitis rather than Synocha. I beg leave to ſuggeſt, with due deference to the learned and ingenious author, that a ſtout man, of a *florid complexion*, and a *full ſanguine habit*, under the influence of *extreme terror*, with a *pain in his forehead*, *his face redder than uſual*, and *his eyes ſlightly inflamed*, with a *pulſe hard*, *ſtrong*, *and regular*, might poſſibly have borne the loſs of blood, on the ſixth day, or on *any day* of the diſeaſe, not only with ſafety, but even with advantage.

We are informed, that from the ſixth day, when Mr. M. firſt ſaw him, the diſeaſe increaſed, though with occaſional remiſſions, for four days. The ſkin was hot, the patient diſpoſed to conſtipation; thirſty; ſhewed no ſigns of nauſea, or want of appetite, but ſwallowed readily whatever was given him. On the tenth day he was quite furious, and could hardly be kept in bed, though ſtrapped down, and reſtrained in bed by two ſtrong men.

That Mr. M. ſaved the life of his patient by a rigid adherence to the antiphlogiſtic plan in every other reſpect, inſtead of treating the diſeaſe as a Typhus, and diſpatching his patient by the aſſiſtance of bark and wine, as is too much the faſhion, will, I preſume, be acknowledged by the moſt reſpectable part of the medical profeſſion.

From the well-known candour and liberality of the author of the paper here commented on, whom I have the honour to call my friend, I doubt not but he will excuſe the freedom of theſe remarks. I am, &c.

JOHN RING.

New Street, Hanover Square,
March 19, 1801.

The following complete and satisfactory Account of the Progress of the Vaccine Inoculation in France, we have translated from the Moniteur (official Paper) of the 11th Ventose, which we received on the 7th of March.

Letter addressed to the respective Mayors of the Twelve Districts of Paris.

CITIZEN MAYOR,

THE Medical Committee established at Paris by the Society of Subscribers for the diffusion of the Vaccine Inoculation, knowing your desire to promote the public good, have the honour of proposing to you, under the auspices of Citizen Præfect of the Department of the Seine, to concur with him in the establishment and propagation of this new method of inoculation.—

It was first discovered in England by Dr. Jenner, and immediately prosecuted with the greatest success by the English physicians, and afterwards by many physicians of Germany, Geneva, and every state in Europe; this method has been only known in France for about one year, through the exertions of Citizen Larochefoucault Liancourt. In the last spring, Citizen Liancourt published a statement, in which he announced, in consequence of the observations of the English physicians, that the Vaccine is a disease much milder than the inoculated Small-pox; that it is not contagious like that, and nevertheless an effectual preservative against the Small-pox.

This announce attracted universal attention; but the more it promised, the more important it became to be assured that it could accomplish what it promised; this certainty could only be attained by experiments. To arrive at it, Citizen Liancourt opened a subscription, the produce of which is to be applied to obtain the experience necessary, to ascertain in France the truth of these assertions. A great number of citizens eagerly subscribed: The subscribers met, and named a Committee of administration to regulate the expences. The funds arising from the subscription have been hitherto sufficient, and an audited account will be laid before the public.

The Society have also named a medical committee, for the purpose of carrying on the experiments. This committee has devoted itself to the trust confided to it, and laboured with the most constant activity from its establishment to the present moment. It has, at least, inoculated more than a thousand, without one sinister event; nay, not one of those inoculated has been confined to his room a single day.

The

The inoculated had conſtant intercourſe with thoſe not inoculated, even ſo intimate, as a mother, who had not had the Small-pox, ſuckling her child under the diſeaſe without the leaſt ſymptom of contagion. This point appeared ſo well eſtabliſhed, that the moſt violent oppoſers of the new method have not ſuggeſted the ſlighteſt doubt on this head.

In a word, the vaccinated have been inceſſantly expoſed to the contagion of Small-pox, even by ſleeping in the ſame bed, and eating and drinking out of the ſame veſſels, without any effect. More than ſeventy-two have been inoculated for the Small-pox, yet none have taken the infection.

The Committee has thus, by numerous experiments, verified the obſervations of the Engliſh phyſicians; and is convinced of the truth of the three principal ſtatements, viz.

1. The vaccine is a very ſlight diſeaſe.
2. It is not contagious.
3. It is an effectual preſervative againſt the Small-pox.

The Committee is preparing a Report, in which, as well as rendering an account of its own labour, it will demonſtrate theſe great truths, and eſtabliſh the public opinion with reſpect to the MOST BRILLIANT AND MOST IMPORTANT DISCOVERY OF THE EIGHTEENTH CENTURY, TO WHICH FRANCE, EUROPE, AND THE WHOLE WORLD WILL BE INDEBTED FOR THE ANNIHILATION OF THAT MOST DESTRUCTIVE SCOURGE, WHICH HAS RAVAGED AND DESOLATED IT FOR SO MANY CENTURIES.

While expecting this grand Report, which its importance has occaſioned to be delayed ſo long, the Committee has given a ſketch of it to Citizen Præfect, whoſe diſtinguiſhed ardour for the diffuſion of knowledge, the ſciences, and arts, and love for every thing intereſting to humanity, was well known to them.

They explained to him that more experiments were neceſſary to render the Vaccine Inoculation perfect; that it was neceſſary to inſtruct and form the inoculators who are ſtrangers to it; and that above all things, it was neceſſary to extend this practice among the people, in order to render it familiar and general, and in ſome degree to naturalize it throughout France, to the end that all might enjoy, and enjoy in the fulleſt extent, ſo great a benefit; that to attain ſo deſirable an end, the Committee muſt have an eſtabliſhment in the centre of Paris, where both practitioners, as well as the leaſt inſtructed and pooreſt of the people, whoſe time is ſo precious to them, might eaſily and conveniently acquire, the one inſtruction, and the other the neceſſary gratuitous aſſiſtance; that all may have it in their power, at their eaſe, and when they judged proper, to come and ſee, examine, clear up, aſſure themſelves, and finally determine

termine from the appearance of the inoculated, all doing well, and the explanations of the inoculators, who would make them perceive, and even feel in some degree the excellence of this method; that these were the only means by which inattention, carelessness, indolence, ignorance, malevolence, and every kind of prejudice, which always set themselves in opposition to new establishments, could be vanquished, particularly when the object is to render them popular.

The Citizen Præfect, who had the same views, hastened to take suitable measures to form this useful establishment, where the public, and above all, the indigent, might find the necessary succours.

The Committee did not rest here; their zeal for the comforts of the poor, and especially for the extension of the art, made them desirous that an emanation from this central establishment might extend to all the twelve departments of Paris; and to you, Citizen Mayor, it belongs to promote this measure in your department.

The Committee proposes to you to charge one of their members, whom they will appoint, to remove into a central part of your department, and to concert with you, with the members and the physicians and surgeons of the Committees of Benevolence, and all other physicians and surgeons whom you may judge proper to call in, on the most effectual means of perfecting and extending the Vaccine Inoculation.

Assistance will thus be found at hand by those who want it, and who, consequently, will become more numerous. The inoculators will be better instructed; and that which is essential both to the interests of humanity and the progress of the art, they will avoid the errors which are almost inevitable, when the Vaccine Inoculation is practiced without instruction and without experience. There is a spurious vaccine, which persons unskilled easily confound with the genuine. This spurious kind does not secure the patient from the Small-pox. What danger then may be incurred by those who having only had this kind, and who believing themselves by this operation secured from the Small-pox, expose themselves to contagion without fear, and even with design? And if the Small-pox happen to supervene, the ignorant and malevolent never fail to attribute the event to the inefficacy of the *true Vaccine*; whereas they have only had a false one. For want of sufficient instruction, and more particularly of experience, we have ourselves been deceived. At the commencement of our labours, it happened to us to confound the false with the true; happily, the habit which we have of observing, and our extreme circumspection, preserved us from the dreadful consquences which might have arisen from this error. Can one constantly

ſtantly hope the ſame reſult from perſons leſs informed, leſs attentive, and above all, leſs exerciſed in the very difficult art of making experiments? May even our error then be profitable to others, and preſerve them from a ſimilar one. The progreſs of the art requires, the intereſts of humanity demand it.

Such, Citizen Mayor, are the motives of the propoſitions which the Committee have the honour of laying before you; in accepting it, you will accompliſh their wiſhes, and partake, Citizen Mayor, with the Præfect of the Department of the Seine, in the honour and the gratification of having concurred in preſerving our fellow-citizens from the dreadful ravages of the Small-pox. Health and reſpect.

Signed, on behalf of the Medical Committee,

GUILLOTIN.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

SINCE the Cow-pox became an object of general attention, the world has been greatly indebted to your Journal for the early promulgation of whatever has conduced to a more intimate knowledge of the diſeaſe. Though my ſituation as Houſe Surgeon to the Mancheſter Infirmary, affords me frequent opportunities of obſervation, yet I have hitherto refrained from ſending you communications on this ſubject, becauſe I wiſhed to compriſe the eſſence of many particular caſes within the compaſs of a few general remarks. Theſe I now tranſmit for your diſpoſal; they are either founded on caſes particularly noticed, or are the reſult of continued attention to the phænomena of this diſeaſe: The information reſpecting the Cow-pox has not only been very extenſive, but alſo contradictory; this renders it difficult either to recollect or diſcriminate the real and imaginary progreſs made in elucidating its nature. I truſt to be excuſed, therefore, ſhould I chance to repeat what has been already made public.

Although it may appear paradoxical, and even abſurd, yet I firmly believe, that the more general introduction of the Cow-pox has met with one obſtacle in its own mildneſs. Almoſt every patient in conſidering the ſubject of inoculation, forms ſome notions reſpecting it, which are often independent of, and frequently unſupported by the evidence of facts; thus biaſſed, he adopts or rejects on grounds equally fallacious, one diſeaſe in preference

preference to another. The abſence of eruption, and more particularly of fever, has been one cauſe to excite this undue prejudice, and proved with many a ſufficient motive for diſbelieving the anti-variolous power of the Cow-pox; several caſes have, however, occurred to me, which, independent of any concluſions drawn from its actual prevention of the Small-pox, clearly evince and beautifully illuſtrate its action on the ſyſtem at large. When children at the time of inoculation have any cutaneous eruption, I have always obſerved it increaſe conſiderably about the ſixth, ſeventh, or eighth day; after this period it is either greatly diminiſhed, or entirely diſappears. This evidently proves the affection of the Cow-pox to be general; and ſuch has been its ſalutary influence in ſome caſes, that in two or three inſtances I have been induced to try it as a remedy in a cutaneous diſeaſe; I have not, however ſucceeded, from my inability to infect the patients, who were all of them ſuſpected to have had the Small-pox.

Another inſtance ſimilar to the above, is ſeen when the infection has taken place more quickly in one arm than in the other; we here find the puſtule about the 7th day on one arm, making its uſual progreſs; while on the other, ſlight marks of inflammation are only beginning to appear: on the twelfth or thirteenth day, however, each arm has a puſtule nearly ſimilar.

From theſe facts, this concluſion (though already eſtabliſhed) may be fairly made, that in every inſtance of regular Cow-pox, a peculiar action is produced in the ſyſtem, though it cannot be always detected by a febrile paroxyſm.

In endeavouring to form an opinion of the ſuſceptibility of infection which different conſtitutions poſſeſs, I have made the following remarks: Perſons of delicate fibres, of ſmooth, lax, and clear ſkin; of flaxen hair and light eyes; ſuch, in ſhort, as are generally conſidered moſt obnoxious to ſcrofula, I have found leaſt ſuſceptible of the Vaccine Diſeaſe. On the other hand, children with dark ſparkling eyes, rough ſkin, and ſtrong muſcular fibre, are very readily infected, have oftener fever, and that more ſtrongly marked than thoſe above.

If this diſtinction proves well founded, it ought, perhaps, to influence our practice as to the depth or number of inciſions which we make in inoculating for this diſeaſe.

In patients of the firſt claſs I have obſerved the infectious matter remain ſo long inactive, that three weeks after inoculation I have from them communicated the diſeaſe to others. I may here remark, that no inconvenience has ever ariſen from the frequent uſe of matter taken at a late period, except this, (which indeed is ſufficient to prevent us uſing it) that in four

caſes

cafes out of five I have failed in attempting to produce infection.

In patients of the fecond clafs, the acmè of difeafe, in two inftances, have been preceded by convulfions; other caufes than the Cow-pox, however, were prefent, to which they might be imputed.

When it has happened that the variolous fupervened to the vaccine infection, the puftules of each, in the early ftage of the difeafe, retained their diftinct characters; but, towards the latter end of it, the vaccine affumed the variolous nature; at leaft the experiments of an ingenious friend, and the appearance of the puftule, incline me to believe fo.

I have only one farther remark to offer. Children are frequently induced by the itching which enfues about the feventh day, to deftroy the vaccine puftule; in this cafe are we to confider them as fecure from the variolous infection, or not? I have made a practice of inoculating again repeatedly, but could feldom or never re-produce the difeafe. Some of your correfpondents, probably, can give me information on this point.

Manchefter Infirmary,
March 17, 1801.

I am, &c.

JOHN HUTCHINSON.

On the Chemical Analysis of Vegetables. By Dr. HERMBSTAEDT, *of Berlin.*

[Continued from Vol. III. pp. 373.]

On the Separation of sebaceous Matter from Vegetables.

THE febaceous matter appears in vegetables in different forms, viz. as a fluid oil, as a fubftance of butyraceous confiftence, and as a firm matter like tallow. As a part, mixed in them, it is fo intimately united with gum, mucilaginous matter and water, that it cannot be eafily difcovered. But when thofe fubftances are reduced into fmall particles by comminution, and by continually ftirring them, kept on a gentle fire till the water evaporates, the gum and mucilage hardens, and the febaceous matter may then, in a pure ftate, be feparated by a warm expreffion, and its weight alfo determined,* after having previoufly freed it from all adherent heterogeneous particles.

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* As it is very difficult, if not impoffible, to obtain all febaceous matter by repeated expreffions, this circumftance fhould be always attended to in determining its quantitive proportion in any fubftance that is to be chemically examined.

On the Separation of the astringent Principle from Vegetables.

All vegetables, in which the astringent principle has been hitherto acknowledged as a constituent part, possess, besides their astringent effects upon the tongue, the property of tanning the fresh hides of animals, of decomposing most of the metallic solutions, and principally of precipitating the iron from its solution in acids with black colour. Astringent principle, tanning principle, black colouring principle, are therefore terms that have hitherto been considered as synonymous, not only with one another, but also with the Gallic acid, which was first discovered by *Scheele.* — That the astringent and tanning principle, however, is only the same, and that it ought to be well distinguished from Gallic acid, Mr. SEGUIN * has but lately evinced, by showing that the tanning principle is precipitated from an infusion of oak bark, by the addition of lime-water; whereas the Gallic acid is contained dissolved in the remaining fluid. This fact Mr. PROUST † has still more evidently proved, by making known the means of extracting the pure astringent principle separate from the Gallic acid, and by showing that this pure astringent principle is capable of changing in a short time the animal gluten, and even the animal vegetable gluten into a coherent mass, insoluble in water, and resisting putrefaction: and it ought, therefore, on account of acting in the same manner upon animal skins, to be looked upon as the true tanning principle. (Tanin.) According to the same chemist, the method hitherto adopted for obtaining Gallic acid, by precipitating an infusion of galls with a solution of sugar of lead, is by no means the proper way, because the Gallic acid and the astringent principle fall in this manner at the same time to the bottom of the vessel with the calx of lead, which is not the case, when, instead of a solution of lead, a saturated tin in muriatic acid is employed, by which means the astringent matter combined with the calx of tin is precipitated as an insoluble product, while the Gallic acid remains with another part of the calx dissolved in the fluid.

This ingenious discovery leads us to quite a new way of exhibiting separately the astringent principle, in the chemical analysis of astringent vegetables.

For

* Rapport au Comité de salut public, sur les nouveaux moyens de tanner les cuirs proposés par le Citoyen Armand Seguin. Journal des Arts et Manufactures, Paris. An quatrieme, T. ii. p. 66, and T. iii. p. 71, &c.

† Extrait d'un Memoire de Mr. Proust, sur le principe tannant. Annales de Chemie, 25 tom. Paris 1798. p. 225, &c.

For effecting the ſeparation of the aſtringent principle from any vegetable ſubſtance, this ſhould be ſufficiently boiled with water and alkohol; and after having mixed both decoctions, the alkohol is firſt diſtilled over, and the reſt evaporated by a gentle fire, till the reſiduum becomes dry. This dry maſs muſt again be extracted with alkohol, which leaves the gum untouched, diſſolving only the ſaponaceous, reſinous, and aſtringent principle. To this ſolution, a ſaturated ſolution of muriate of tin, after being diluted with water, is to be poured till it predominates, whereby a precipitation is occaſioned. The remaining fluid contains free muriatic acid, muriate of tin, and gallate of tin, along with the other particles of the plant; and after having poured it off, it may be ſeparately preſerved;* but the precipitate is a combination of aſtringent principle with the calx of tin. In order to ſeparate this combination, and to obtain the aſtringent principle in a pure ſtate, a ſufficient quantity of water impregnated with ſulphurated hydrogen gas is to be added to the maſs, after it has been diluted with diſtilled water. The ſulphurated hydrogen, uniting with the calx of tin, precipitates it in the form of a blackiſh powder, whereas the aſtringent principle remains diſſolved, and combined with the fluid. If this is ſlowly evaporated, the pure aſtringent principle is left in the form of a dry and brown ſubſtance, gloſſy when broken in two, whoſe weight may alſo be determined.

On the Separation of the colouring Principle from Vegetables.

Whether the colouring principle *(principium tingens)* in the vegetables is a principle of its own, or whether it rather originates in the mixture of different matters; and laſtly, whether it does not even differ in its elementary mixture according to the difference of colour which it ſhows, are queſtions that I have not hitherto been able to aſcertain, and ſeveral experiments made on purpoſe have ſtill left me in doubt on this ſubject. What I have found by my own experience is, that in ſeveral vegetables, the colouring principle is involved with reſin, in others with gum and ſaponaceous matter, and in others

* If the fluid which contains the Gallic acid is impregnated with ſulphurated hydrogen gas, the tin falls to the bottom of the veſſel, and the Gallic acid remains fluid, and mixed with muriatic acid and the other vegetable ſubſtances; and if theſe be not in too great a proportion, the Gallic acid may be ſeparated in a cryſtalline form by a ſlow evaporation; but, on the contrary, if there is too great a quantity of thoſe ſubſtances, it will be impoſſible to perform an accurate ſeparation of it.

with mucilage and farinaceous matter. As this cannot be accurately determined, every ſubſtance in which the colouring principle is to be diſcovered, ought to be expoſed to ſeveral proceſſes, as follows:

1. Infuſe a plant with diſtilled water, and if the colouring principle be combined with gum or ſaponaceous matter, it will be contained in the infuſion, and adhere to a piece of linen, woollen, or ſilk cloth immerſed in it.

2. Infuſe any part of a plant with cauſtic ſpirit of Ammonia, and expoſe it to a gentle digeſtion. Should the colouring principle be blended with reſin, it will be diſſolved, and impart a colour to the fluid, and likewiſe to linen, woollen, or ſilk cloth, immerſed in it.

3. If the colouring principle be embodied in mucilage or farinaceous matter, as is the caſe in indigo and madder, a portion of the freſh plant ought to be pounded with water, and after having diluted it with more water, left to ferment; and from the colour of the ſcum generating on the ſurface, it may be concluded whether there is any principle preſent.

I have hitherto not been able to determine its proper quantitive proportion.

On the Separation of the cauſtic Principle from Vegetables.

The exiſtence of a cauſtic principle in vegetables can by no means be denied, but it ſufficiently diſcovers itſelf in horſeradiſh, in ſeveral ſpecies of creſſes, in garlick, by its pungent ſmell; and in the arum (wake robin root), and in ſeveral kinds of cabbage; farther, in Indian and black pepper, and many other vegetables, by its acrimonious taſte. However, I have been taught by numerous operations, inſtituted for that purpoſe, that it is ſcarcely poſſible, at leaſt by the experiments that have hitherto been made, to ſeparate it from other combinations, and to aſcertain its quantitive proportion in vegetables. This principle being volatile, it may be ſomewhat ſeparated in combination with water, by infuſing the plant in which it is contained, and expoſing it to diſtillation; but this is all that can be ſaid of it.

I have hitherto endeavoured in vain, by ſeveral experiments, to exhibit the narcotic and bitter principle of vegetables. The former, however, may at leaſt partly be ſeparated, by treating narcotic vegetables in a retort, without the addition of any fluid, at a temperature of 212° Fahrenheit; whereby a great part of narcotic matter is obtained in a vapour, that goes over, and is thickened in the cool receiver; the greateſt part, however, remains in the retort. But it is by far leſs poſſible to repreſent

represent separately the bitter principle (principium amarum) of vegetables, and both parts seem to be so intimately combined with gum, saponaceous matter, and resin, that there is no hope of ever effecting a proper separation of them, and ascertaining their quantitive proportion.

With respect to the sour or acid salts, as well as to the perfect and imperfect neutral salts and salia media, it is to be observed, that they are generally contained in vegetables in such a small quantity, and at the same time so intimately united with other component parts, and even intermingled with one another, that it is scarcely practicable to separate them entirely from each other, and to determine their quantitive proportion accurately. All, therefore, that I can say in the following paragraphs about the separation of those substances, relates only to the manner of proceeding in general, and I cannot be answerable for the results being always accurate and correct in every small instance.

On the Separation of Tartarous Acid from Vegetables.

When upon a previous trial with any vegetable substance, the presence of a free acid is discovered in it, it is advisable to take the fresh plant for determining and extracting from it the sour principle. Any quantity of it is therefore bruised in a stone mortar, and the juice expressed. The residuum, after being infused, and stirred up with distilled water, is again expressed, which operation must be repeated till no free acid is discovered in it by re-agency. All the juice thus obtained is afterwards boiled up in a tin kettle, or in a glass vessel, being mixed with the white of eggs, till it is clarified, and its impurities scummed off. The whole, after having become cool, is filtrated through blotting paper. The clear acidulous juice is then seethed again, and in continually stirring it, finely powdered oyster-shells added, till no effervescence ensues.—The precipitate, which is hereby caused, is to be separated, after having been suffered to deposite quietly, by cautiously pouring off the fluid. For separating from this precipitate the adherent heterogeneous particles, it ought to be repeatedly edulcorated with distilled water. It is then dryed, and put into eight parts of distilled water, to which is to be added a quantity of concentrated sulphuric acid, equal to half the weight of the precipitate. This mixture being well stirred, is digested for 12 hours, after which time the whole is filtrated, and the residuum well washed out with distilled water. All the liquor thus obtained, is evaporated by a gentle heat, and by degrees

degrees cryſtallized *. The cryſtalline ſalt is the tartarous acid.

On the Separation of the Oxalic Acid.

When a previous examination of a plant diſcovers in it oxalic acid, its juice is after the above mentioned manner to be treated and clarified. The clear liquor is then poured into a diluted ſolution of muriated barytes, by which means the oxalic acid uniting itſelf with the barytes, will fall to the bottom, and the tartarous and malic acid remain. From this precipitate, after it has been carefully waſhed, the oxalic acid may be ſeparated by ſulphur, and exhibited by cryſtallization.

On the Separation of the Malic Acid.

By treating any vegetable juice that contains malic acid in the above manner, the malic acid remains diſſolved and combined with the calcareous earth. In order to ſeparate it, a ſolution of ſugar of lead with diſtilled water ſhould be dropped into that liquor, till no further precipitation is produced. The malic acid falls in this manner to the bottom along with the ſugar of lead, whereas the acetous acid remains combined with the calcareous earth in a diſſolved ſtate. The precipitate being infuſed with diluted ſulphuric acid is committed to a digeſtion, by which means the calx of lead unites with the ſulphuric acid, and the malic acid remains combined with watery particles, from which it may be ſeparated by evaporation.

On the Separation of the Benzoic Acid.

Benzoic acid has been hitherto found in no other vegetable ſubſtance, except reſins and balſams, from which it may be obtained in two different ways.

1. Expoſe any of theſe ſubſtances to a dry diſtillation, whereby the Benzoic acid will partly cryſtallize in the neck of the retort, and partly go over into the receiver with the other particles. For ſeparating it, the neck of the retort is waſhed out with warm water, which is then poured to the reſt that has been diſtilled over; and after having added eight times as much water as what the whole fluid amounts to, it is heated till the

* Should the plant contain at the ſame time oxalic and malic acid, the latter remains diſſolved in the liquor with the calcareous earth at the firſt ſaturation; but the former with the gypſum, as it cannot be ſeparated from the calcareous earth by ſulphuric acid. If there be, however, citric acid preſent in the plant, it remains combined with the tartarous acid, from which it is ſcarcely to be ſeparated.

the water begins to ſeeth. The hot water receives the Benzoic acid, leaving the oily particles untouched. The whole is ſeparated by a ſeparating funnel, and the watery fluid ſlowly evaporated, till the Benzoic acid begins to cryſtallize.

2. A portion of the ſubſtance that is to be examined is boiled for half an hour with a fourth part of quick lime and ſixteen parts of water. The Benzoic acid combines itſelf in this way with the calcareous earth, and diſſolves in the water. The liquor being filtrated, is mixed with muriatic acid, till this begins to predominate; by which means the Benzoic acid ſeparates in ſmall cryſtals as it cools. The reſt of the fluid, when evaporated, affords ſtill more of the acid.

On the Separation of the Saccholactic Acid.

The ſaccholactic acid has not been hitherto determined to be a component part in vegetables, but the gummy and mucilaginous matters always yield it when they are boiled with nitrous acid. Whether, therefore, it is really a component part of thoſe ſubſtances, or whether it is firſt compoſed during the operation from them and the oxygen of the nitrous acid, has not yet been ſufficiently aſcertained. This acid may be obtained from thoſe ſubſtances, by boiling for five minutes one part of them with eight parts of nitrous acid, (conſiſting of one part of ſpiritus nitrifumans and one part and a half of water). After the reſiduum becomes cool, the ſaccholactic ſeparates in form of an acidulated difficultly ſoluble powder.

On the Separation of Tartar and Salt of Sorrel.

When an eſſential ſour ſalt, either tartar or ſalt of ſorrel, or both mixed together, is traced in any plant, the ſeparation ſucceeds beſt in the following manner.

1. A certain quantity of the freſh plant is expreſſed, and the juice clarified after the above method. This juice being thickened to the conſiſtency of a ſyrup, is infuſed with ſix parts of rectified ſpirit of wine, and digeſted; whereby, if any of thoſe exiſted in the plants, it is found cryſtallized after the fluid becomes cool.

2. The cryſtallized ſalt ſhould then be ſeparated from the fluid, and by being repeatedly diſſolved in diſtilled water, diſengaged from any adherent heterogeneous particle.

3. The form of the cryſtals ſhows whether it is pure tartar or pure ſalt of ſorrel; but if both are mixed with each other, this may be diſcovered in the following manner: Put a little into a ſilver ſpoon, and hold it over hot coals. Should the maſs then emit during the melting, vapours ſmelling like burned

burned sugar, without forming a sublimate, on a glass plate held over it, it is pure tartar; but if white vapours rise on a glass plate to a white and sour powder, this is the oxalic acid, which shows the mixture of salt contained to be salt of sorrel. *

On the Separation of Saltpetre from Vegetables.

When a plant contains saltpetre, this is easily discovered by burning the dry plant in a candle; whereby, if but little saltpetre exists in it, a weak detonation is remarked. Being in this manner convinced of the presence of saltpetre, bruise a certain quantity of the fresh plant, and express the juice, which having been clarified according to the above method, and thickened to the consistency of syrup, is also treated with rectified spirit of wine, whereby the saltpetre is obtained in a crystalline form, after the spirituous digestion being cooled.

[To be continued.]

* When the vegetable acids are perfectly neutralized in plants with alkalies or earths, and principally when these combinations are easily soluble, they are so intimately combined with saponaceous matter, that a separation is in vain expected, and one must be contented with only knowing their existence in vegetables. The neutralization with ammonia is recognized, by adding quick-lime, from the volatile smell, and the white vapours that rise, when a piece of wood, moistened with concentrated acetic acid, is held over it. A separation of the ammoniacal neutral salts is likewise not obtainable, even if the neutralization be effected by mineral acids.

CRITICAL

CRITICAL RETROSPECT OF MEDICAL AND PHYSICAL LITERATURE.

[FOREIGN AND DOMESTIC.]

Elementarlehre; i. e. Elementary Doctrine of Organic Nature, by Dr. F. J. Schelver. Vol. I. Organomy, 1800, pp. 103, in 8vo. *Gottingen, Dieterich.*

It is very consoling to the rational physician, to contemplate the active spirit and the vigorous efforts of the present age, in order to penetrate into the mystery of the final cause of organic phenomena, to point out the constant laws which rule their eternal vicissitude, and by that means to establish a higher degree of certitude and solidity in the medical art than it has hitherto enjoyed. Every contribution tending to that purpose, ought to be thankfully received, and every idea duly regarded, by which we may hope to advance in the intricate knowledge of our organization. The ingenious author of this publication has endeavoured to contribute his share towards its attainment, and by applying the principles of philosophy, to throw new light upon the elements of physiology; in which attempt we readily grant, he has not been unsuccessful, and has not only shown a great deal of acuteness and penetration, but also brought forth several interesting ideas, which, if farther prosecuted, are likely to bring us nearer to truth, and to improve our knowledge of organic nature. After having shortly explained in *the introduction,* the purpose of his work, the author divides the first part of it, or the *organomy,* in which the general as well as particular laws of organic nature are investigated, in the subsequent sections. 1. *On the nisus formativus of nature.* Here the author expounds the idea of *matter,* according to Kant's principles, by adopting only two fundamental powers, the *attractive* and *repulsive,* from which the existence of *matter* is deduced. 2. *On the ideas of organic and inorganic nature.* The author here very justly draws the following conclusion: "Inorganic is quite a relative idea, and nature is an organic whole." 3. *Difference of life and organization,* in which however he seems not to distinguish accurately enough, as it would be proper previously to fix the notion of life before that difference should be stated. 4. *On vis vitalis.* The definition which he gives of vis vitalis, appears to be very plausible. "Life, he says, is the combination of proportionate powers, which by their reciprocal action, produce the phenomena which we call life." 5. *The living organic body more closely contemplated.* This is a recapitulation of his former statements, and an account of the [illegible] of the vis vitalis. 6.

Difference between Animals and Vegetables. After having examined the different definitions, by which the naturalists attempted to constitute the difference between the animal and vegetable creation, the author adopts the opinion of Prof. FICHTE, who thus states it. "Plants are formed and nourished by raw matter, whereas the animals receive their nourishment from the regnum organisatum." 7. *On the difference between man and animal.* This section is merely metaphysical, and the result of it is, "In men there is an organization for *freedom*; in the other organic bodies, there is an organization for *instinct*." 8. *Elements of the physiology of the living bodies.* The author divides the whole system of physiology into the vegetable, animal, and human nature, viz. 1. ORGANIZATION FOR THE INSTINCT, a, *nutrition by inorganic matter* (plant) b; *nutrition by organic matter*, (animal.) I. ORGANIZATION FOR FREEDOM, (man.) 9. *On the scope of nature*; very metaphysical. 10. *On the scope of living bodies*; where he says, that all shall reciprocally nourish, preserve, and form themselves. 11. *Deduction of the organic body*; a recapitulation of all its different laws and conditions: This section is written with particular acuteness.

Olai Swartz, dispositio systematica muscorum frondosorum Sueciæ. Adjectis descriptionibus et iconibus novarum specierum. Erlangæ, apud J. J. Palm. 1799. p. 112 in 8vo. minor. Tabb. Cen. IX.

THIS publication ought to be a very acceptable present to the connoisseurs and lovers of the finer Botany, as it exhibits a description of the numerous mosses of Sweden, a country so rich in cryptogamical plants, and is at the same time composed by a botanist, who is known to be particularly conversant in the difficult tribe of mosses. This part of the Swedish Flora has received considerable improvements, from the assiduity of Prof. SWARTZ, since LINNÆUS's time, as of the two-hundred and three species which are here enumerated, ninety-eight were unknown to LINNÆUS. We have however much reason to suppose, from the extent of that kingdom, and its variety of soil, that there may be still several species, which escaped the notice of our author, viz. *Orthotricum Offine, Grimmia Cribrosa, &c.* In the arrangement of the genera, he follows the method of HEDWIG, according to the alterations and improvements that it has undergone by Dr. SCHREBER, from whom however he differs in some respects; though this seems not always to merit the approbation of botanists. Each species is well characterised, a few inaccuracies and mistakes excepted; and with respect to the synonymous terms, he has mostly confined himself to DILLENIUS, LINNAEUS, and HEDWIG. Several trivial names are altered, because they gave rise to confusion and mistakes, and several doubts are removed, to which some species of LINNAEUS and DICKSON were exposed. The external neatness and elegance of the book keep pace with its internal value. The plates are well executed and neatly coloured, representing mostly new species, as *...nia alpicola, Didymodon cernuum, Dicranum*

cranum Schreberi, Orthotrichum obtusifolium et pumilum, Polytrichum, longisetum, Arcticum, &c. We regret that from the plan of our Journal we cannot give a fuller account of this work, adequate to its merits, however, we hope that it will come into the hands of every botanift who ftudies the cryptogamical plants.

Europens Vorzugliche Bedurfnisse; i. e. The principal Neceffaries of Europe from Foreign Countries, Botanically and Chemically examined and confidered with refpect to their Dietetic and Medical Ufe; by Dr. C. W. JUCH, &c. No. I. *Coffee and its Substitutes.* 1800; pp. 720, in 8vo. Nurnberg.

Dr. JUCH, whofe name is already known to our readers, propofes in this publication to examine fcientifically the different productions that are imported from foreign countries, and the ufe of which has become at the fame time univerfal and neceffary through all Europe, from the higheft ranks to the loweft clafs of (people [illegible] coffee, [illegible] &c. and likewife to inveftigate their medical and dietetical qualities, and how far the different fubftitutes anfwer their purpofe. The prefent number is devoted to coffee and its fubftitutes, a beverage particularly familiar upon the continent. After having premifed the botanical defcription, the author proceeds to give a chemical analyfis of coffee and its fubftitutes, according to his own experiments. He analyfed the coffee of Martinique, and found by diftillation, and the preparation of the watery extract, and treating the refiduum with fpiritus vini, in 300 grains, 80 grains of extractive matter, (in which, neither tanin nor an acid could be traced); in 200 grains of the refiduum, 18 $\frac{1}{2}$ grains of a pure bitter refin; 20 grains of the laft refiduum, when treated with nitrous acid, yielded a fubftance like wax, that did not fuffer any change by repeated edulcorations; with potafh a faponaceous mixture was obtained. (Here the author remarks, that common wax is compofed by the carbon and hydrogen of the pollen of flowers, the azote of the bee, and the oxygen of the atmofphere.) At the burning or roafting of the coffee beans, carbon is difengaged, and by uniting with hydrogen forms an oily fubftance, with which the refinous particles combine themfelves. The oxygen of the atmofphere feems alfo to be active, as by roafting the coffee too much, acetous acid is evolved. The goodnefs of the coffee depends on the proportion of the quantity of refin to the extractive matter, on which account bad coffee may be improved by pouring hot water upon the beans, over which it is fuffered to ftand for fome time, which procefs deprives them of a part of extractive matter. 1000 grains of fuccory root, *(Cichorium Intybus, Lin.)* a fubftitute that i moft generally in ufe, yielded 250 grains of a very bitter watery extract, and 30 grains of refinous extract. The root of *Scorzonera Italica, L.* another fubftitute for coffee, afforded of 100 parts, 0,32 water, 0,10 fweetifh watery extract, 0,09 farinaceous matter, 0,03 refin, 0,46 fibrous fubftance. The beet root contained 0,47 water,

 0,13

0,13 ſweet watery extract, 0,07 ſugar, 0,04 albumen, 0,04 ſal ammoniac. This root affords the beſt ſubſtitute. After having previouſly extracted the ſaccharine particles, it ought to be carefully dried, and gently roaſted. The medical virtues of coffee are, according to the author, excitant; and he denies that coffee relaxes the fibre, as is by ſome ſuppoſed. He alſo ſtates how far the uſe of coffee is wholeſome or unwholeſome, according to age, conſtitution, climate, &c. He recommends us to drink it one or two hours after the meal, or, which is ſtill better, one hour before it. It agrees better with perſons of leſs irritability than with others, &c. As a remedy, it proves of ſervice in ſcrophula, hypochondriaſis, aſthma, diarrhœas, agues, againſt narcotic poiſons, &c. The ſalubrity of the ſubſtitutes ſeems to depend upon the ſimilarity of their conſtituent particles with the true coffee, and on the mode of preparation. The beet root deſerves to be preferred to all other ſubſtitutes; however, none of them is able to replace the genuine coffee, which is always more agreeable to the taſte. Theſe are the contents of the firſt number of this uſeful publication, and its continuation ſeems very deſirable.

Filicum Genera et Species Recentiori Methodo Accomodatae, Analytice Descriptæ, a JOANNE HEDWIG, M. D. ac Profeſſore Botanices in Studio Literario Lipſienſi, &c. Iconibus ad Naturam Pictis Illuſtratae a Romano, Adolpho, Filio, Phil. et M. D. 1799. Lipſiae. Six plates, and five ſheets and a half. Price 12s.

THIS is the laſt production from the pen of that great botaniſt, the late Mr. Hedwig; but the firſt Faſciculus we have before us, makes us wiſh that it may be continued after the author's death. After having made ſome remarks on the terms uſed in the deſcription of ferns, on their generic character according to the parts of fructification, the author proceeds to fix the character of the genus *Trichomanes*, to which the preſent faſciculus is devoted. Dr. Smith had ſeparated this genus into two different genera, viz. *Trichomanes* and *Hymenophyllum*, which however Dr. Hedwig thinks not neceſſary; and beſides, as the character of both genera eſtabliſhed by Doctor Smith, appears to him not ſufficiently clear and diſtinct, he unites them again under *Trichomanes* for preventing confuſion. The deſcription of the ſingle ſpecies is done with much accuracy, and the neceſſary ſynonyms are added, together with the place of growth, and the explanation of the plates. The ſpecies deſcribed and figured in this Faſciculus, are *Trichomanes crinitum* from Jamaica, *Tr. pyxidiferum, L. Tr. hymenoides*, a new ſpecies, *Tr. pinnatum*, likewiſe; *Tr. criſpum*, Plum. *Tr. ſcandens, L. Tr. lucens, Sw.* from Jamaica; *Tr. puſillum, Sw. Tr. rigidum, Sw. Tr. tenellum, Sw. Tr. reptans.* The plants are repreſented in their natural ſize, and alſo magnified; the ſingle parts of fructification are particularly figured with accuracy and elegance.

Aſclepiades;

Asclepiades; i. e. Asclepiades and John Brown, a Parallel by Dr. K. F. Burdach. 1800. Leipsic, Meisner, 8vo.

The history of Asclepiades the Bythinian, has been but lately successfully treated. Asclepiades was at the head of the methodic sect, and his name obtained a very high celebrity, equal to that which Brown begins to enjoy as the author of a system of medicine, that meets with so much applause, particularly on the Continent. It is therefore not an unlucky idea of Dr. Burdach, to draw a parallel between these two men and their respective doctrines, which have occasioned such a revolution in the medical science; and the manner in which he has acquitted himself of this task, renders his book very agreeable to read. He commences with representing their individual qualities, situation, character, and scientific knowledge, and explains the circumstances that gave rise to both their systems, of which he gives the elements. The whole is concluded with observations on both systems.

A System of Dissections explaining the Anatomy of the Human Body, the Manner of displaying the Parts, and their Varieties in Disease. Vol. I. containing the Dissections of the Abdomen, Thorax, Pelvis, Thigh, and Leg; by Charles Bell, Fellow of the Royal College of Surgeons. Folio, in five numbers, 5s. 6d. each. Johnson, London.

We have delayed our observations on this very useful work, and excellent guide to the student of Anatomy and Surgery, till the completion of the first part of the author's design.

This volume comprehends the dissection of the abdominal muscles and viscera, with the effects of disease on these parts; the anatomy and diseases of the contents of the thorax; diseases of peritoneum; section of the pelvis; points of surgery illustrated by the section of the pelvis; contents of the pelvis as seen from behind, and plan of the arteries; the descent of the testicle; hernia and hydrocele; dissection of the fascia, superficial parts on the fore part of the thigh; diseases of the cutaneous veins, lymphatics and fascia; ligament of the thigh and femoral artery in the groin; tumors in the groin; popliteal aneurism; and dissections of the back part of the thigh, and of the leg and foot.

The drawings from which the engravings are taken, are highly creditable to the author's ingenuity, and furnish the student with a fair example of the utility, we had almost said the absolute necessity, of the art of designing, for those who wish to become good anatomists and operators.

The author gives several useful directions on the mode of making anatomical preparations by injection, which we select for the gratification of those who have not opportunities of consulting the original.

"To those who are commencing their operations, small subjects will be found the most convenient, being more easily managed, and not likely to embarrass the student with much confusion. Besides, his views at first should not be so immediately directed

directed to practice; his object ſhould rather be to acquire general ideas of the anatomy. Young ſubjects are likewiſe much fitter for injection (I mean for the injection of the arteries, and for minute injection): they are not only more eaſily heated and managed, but, what is of more conſequence, their blood-veſſels have an elaſticity and ſtrength which enables them to bear the puſh of the injection better, and, by a kind of elaſtic reſiſtance, to give warning of the danger of rupturing their coats; while, in old bodies, the piſton of the ſyringe goes eaſily down ſo far, ſtops, and, if forced, moſt probably burſts the veſſels, driving the injection amongſt the muſcles, and giving much trouble in the diſſection. When any of the trunks burſt in this way, the tenſion being taken off, their coats contract upon the warm injection, and they remain half filled.

"In old age, this want of pliancy becomes very remarkable. There is often a kind of ſtiffneſs and rigidity, as if the coats of the veſſels were corrugated; a degree [illegible] in which we find the arteries when oſſified, or when concretions are formed in their coats.

"If only ſome coarſe injection is in a ſlovenly manner to be thrown into the great veſſels to ſhow their courſe, it does not much ſignify how it is done, or what injection is uſed, or what means are employed to facilitate the paſſage of the injection. But if the veſſels are to be injected minutely, it is neceſſary previouſly to heat the ſubject well, by bathing it in warm water, or applying ſteam to the ſurface. This is of more conſequence than even the choice of the ſubject; for, as the injection is intended to be pentrating and fluid when warm, and, upon becoming cold, to congeal and remain ſolid in the veſſels, it is neceſſary that the veſſels be heated, that they may not ſuddenly chill the injection: beſides, this heating of the body ſoftens and relaxes all the maſs of fleſh, and brings it to a more ſuitable ſtate for admitting injection. But it ought to be remembered, that, if the parts be overheated, eſpecially where the veſſels to be injected lie expoſed, there is danger of ſpoiling all, by corrugating their coats, and making them quite friable and tender. There is a better way ſtill of heating the ſubject; viz. by heating the veſſels themſelves; and, indeed, the two methods ſhould be always combined.—The common practice in the injection of the great veſſels, is, to inject firſt equal parts of brown and white ſpirit varniſh, coloured with the ſame paint that is uſed for the coarſe or wax injection; and this fine varniſh injection, being moderately heated, and thrown in before the wax injection, clears its way, and moderately heats the veſſels, ſo that they do not readily cool or retard the wax injection which is to follow. But when uſing minute injection (which is ſize coloured with vermilion) for the purpoſe of demonſtrating the minute veſſels, although the hard injection is thrown into the veſſels after it, ſimply to ſtop the regurgitation of the warm and liquid ſize, and to retain it in the minuteſt extremities of the veſſels, yet it infallibly happens that the wax injection runs more

more minutely in this way than in any other. This being the caſe, it will be found, in all caſes, to be a better method to uſe painter's ſize, coloured with vermilion, and heated, but not ſo much as to criſp the veſſels; and to throw it in before the coarſe injection. It is the leaſt expenſive, runs more minutely, gives always a chance for beautiful ſpecimens of minute injection, and can be puſhed to any quantity, even till the ſkin of the limb becomes quite tenſe, without rupturing the veſſels, or thoſe veſſels at leaſt by which the coarſe injection can eſcape. By this means, the veſſels are dilated, the limb made warm and moiſt, and the wax injection flows eaſily into the arteries, whilſt the ſize eſcapes with the ſlighteſt preſſure into the cellular texture.

" There are ſtill other things which require attention; viz. the tying of all [illegible]s that may have been opened, and the fixing of the tube ſecurely in the mouth of the veſſel. When the injecting pipe is introduced into the veſſel, it cannot be retained there by a ſimple knot, without a chance of its ſlipping off during the injection, or, if tied firmly, of cutting the coats of the veſſel. Therefore, after the ligature is drawn upon the artery including the tube, the ends of the ligature ſhould be brought over the wings of the tube, and then carried round ſo as to include that part of the ligature which reaches from the mouth of the tube to the wing; and being tied there, the former knot is tightened, and the mouth of the artery drawn up upon the barrel of the tube.

" The coarſe injection is compoſed of the following ingredients: Bees wax, ſix ounces; reſin, eight ounces; turpentine varniſh, ſix ounces. The wax and reſin give hardneſs and conſiſtency; and the varniſh is added to give it pliancy. Theſe colours are generally uſed: Vermillion, king's yellow, flake white, ſmalt, verditer, verdigriſe, lamp black. They ſhould be mixed with the turpentine varniſh, and then added to the wax when melted; and ſhould there be occaſion to melt the injection a ſecond time, the heat muſt be cautiouſly applied, leſt the colours ſhould be burnt and deſtroyed. The injection ſhould not be thrown into the veſſels while too warm, for it will hurt their coats. The degree of heat ſhould be ſuch, that the finger can be allowed to remain in it for a little while.—A coarſer compoſition may be made with tallow, wax, ſpirit of turpentine, and oil, coloured with the coarſer paints; or, ſimply, tallow and red lead, when the parts are not to be preſerved. And for minute injection, turpentine, coloured with vermilion, (which Haller preferred to all other injections, for running minutely, and without extravaſation); painter's ſize, coloured with any of the above paints; or equal parts of brown and white ſpirit varniſh.

" When delicate membranes are to be injected either with quickſilver or with fine ſize, inſtead of tying all the veſſels by which the fluid may eſcape, I have found it neceſſary only to ſear the edges of the membrane with a heated iron; or, after having fixed the tubes, the common method is to dry the edges all round, while the middle part is kept ſoft and moiſt. When it is required to

to demonſtrate the vaſcularity of a part where there is no opportunity of injecting it, if membranous, the blood may be detained in the veſſels by quickly drying and varniſhing it. The blood, when extravaſated, or when (as in the piles) preternaturally collected in veſſels, may be coagulated by a ſolution of alum; or blood inflamed parts may be coagulated by diſtilled vinegar. In other inſtances, as in preparations of the lacteals, their natural fluids may be coagulated and preſerved by plunging them ſuddenly into ſtrong ſpirits.

" There are many parts of the body which it is impoſſible to keep for any time in their original beauty, and theſe the moſt delicate and intereſting; as the organs of the ſenſes, and all minute nervous parts, the villi of the inteſtines, the comparative anatomy of inſects, the incubated egg, &c. The demonſtration of ſuch delicate parts in the freſh ſubject is the trueſt [illegible] of the abilities of the practical anatomiſt; for there is more delicacy and nicety required in expoſing theſe parts, and more real benefit to be derived from them, than in making the more laſting preparations.—The minute ſtructure of many of theſe parts muſt be diſſected and unravelled under water, where the looſe and floating membranes diſplay themſelves; while, out of the water, they would lie collapſed and undiſtinguiſhed. In ſuch inveſtigations, I have found nothing of ſo much ſervice as jelly made ſtrong and quite tranſparent. When a delicate part is completely diſſected (ſuppoſe it to be the coats of the eye,) place it in the jelly as it is becoming firm, and hold out the parts; and they will be retained, elegantly diſplayed, either for demonſtration or for drawing."

The following obſervation is well worth the attention of ſtudents.

" From what I have ſeen of private diſſection, I would rather adviſe thoſe who are deſirous of undertaking a complete courſe of diſſections, not to begin their labours with learning all the muſcles of the body; for this, beſides other diſagreeable circumſtances, is a dry and tedious taſk at firſt.—It will perhaps be found more truly uſeful to begin their diſſections with general views to the economy of ſuch parts as, from lectures or books, they know to be of importance; then proceeding, in a more determined way, to ſtudy rigidly the anatomy of the bones and muſcles, and accidents of the great joints,—the blood-veſſels and nerves, and the anatomy of the great operations of ſurgery.

" During diſſection, there are many little operations which ſhould be practiſed, and which are neglected. The introducing, for example, of probes into the ducts, as into the naſal duct, and into the ducts of the ſalivary glands; the introducing of inſtruments into the noſe and throat, and into the Euſtachian tube: the uſe of the probang, and of the catheter, &c.—Knowledge and dexterity in ſuch points often prove more uſeful, as being oftener required, than the greater operations of ſurgery."

[To be continued.]

Aſthenology,

Asthenology, or the Art of preserving feeble Life, and of supporting the Constitution under the Influence of incurable Diseases. By C. A. Struve, M. D. Tranflated from the German, by W. Johnston, 8vo. pp. 431, price 8s. London. Murray and Highley.

On the interefting fubject of this work, the Author feems to have exhaufted every fource of information, and to have fuffered nothing connected with his fubject to efcape him. On the importance of Afthenology, efpecially at this time, the author in the introduction fays, "Thofe acquainted with the value of human life, know the importance of a year, a day, and even an hour; and thefe when fpent amidft the full enjoyment of the vital functions, of how much importance to our whole exiftence! What events, fertile in confequences, depend often on one hour of our life! It is, ther[illegible]al and irreparable lofs, when not enjoyed as it ought. On the bed of death, an hour often determines the fate of whole families and ftates. How many fick die in greater peace, becaufe, by having lived an hour longer, they accomplifhed one of their moft ardent wifhes. With what anxiety do many dying fathers wifh for fuch an hour, becaufe they expect the arrival of an abfent fon. How grateful is this hour to furviving friends, who have received from a dying man information refpecting fome important event of his life. Is any thing farther neceffary to give importance to the art of prolonging feeble life?

"In the prefent period, when the number of afthenic difeafes is fo confiderable, this art muft recommend itfelf; and indeed, never was it fo neceffary both for the phyfician and the patient. This is the cafe in particular, among phyficians of the firft clafs, who have to ftruggle againft artificial as well as natural debilities. It too often happens that afthenia exifts to fuch a degree among enervated people, weakened by their mode of life, that no hope is left of reftoring their loft health, much lefs of converting their increafing infirmities into ruftic health and ftrength; and that the higheft triumph which the medical art can obtain, is to affift the gouty voluptuary, or the nervous lady of fafhion, to hold out for a couple of years longer; efpecially when he has to counteract or overcome inceffant irregularities and debilitating habits, which his patients will not abandon. How many phyficians, by their fituation, are obliged to acquire experience in this great art, and yet are blamed becaufe the artificial life which they procure to their exhaufted patients, for a number of years, comes at length to an end."

This volume is divided into two parts; the firft is intitled *Asthenogeny*; in which the nature of the vital principle, animal organization, the fymptoms or phænomena of feeble life, and afthenic difeafes, together with their caufes, are minutely explained.

In his concluding obfervations on the vital principle, Dr. S. obferves, "The vital principle may exift in an organized body in very different degrees. This difference depends on the organiza-

tion of the body itſelf; according as it is more or leſs ſuſceptible of the vital principle.

"This difference of ſuſceptibility is obſerved,

"1. In the nature and conſtruction of different bodies; thus there is more vital principle in plants than in animals.

"2. In the particular vital ſuſceptibility of organized bodies of the ſame genus; thus ſome men have a much greater quantity of the vital principle than others.

"This ſuſceptibility of the vital principle is,

"1. ORIGINAL: innate as it were; *fortes creantur fortibus.*

"2. ACCIDENTAL; it is deſtroyed by diſeaſes which effect a derangement of the organization.

"A total loſs and deprivation of the vital principle, and a commencement of the free action of the chemical powers in the body, is death.

"Death enſues:

"1. In conſequence of the organization being deſtroyed, by which means it is rendered incapable of being acted upon by the vital principle. This is effected,

"By the force of external powers and violent impreſſions:

"By the gradual decay of vital ſuſceptibility in the organization in the courſe of time: death in old age, when the organs become inſenſible to external ſtimulants; when their ſuſceptibility of irritation even is blunted, by which the progreſs of the bodily functions is rendered ſluggiſh and ſlower, ſo that they can be excited only by uncommon ſtimulants, till the machine at length ſtops:

"By the long continuance of very violent excitement, or an immoderate activity of the vital principle, which produces weakneſs and death; an irregular life, uninterrrupted mental irritation.

"2. Or by the loſs of the vital principle itſelf, even when the organization is in a perfect condition, in which caſe the vital organs alone ſuffer.

"Death enſues either SUDDENLY, when the body is at once exhauſted of the vital principle; or SLOWLY, which is common natural death.

"Except in theſe ſudden caſes, the tranſition from life to death takes place ſlowly; and the vital principle always lingers in the chief organs, even when it has been withdrawn from all the external parts of the body. In the moſt common kind of death, the tranſition takes place by means of apparent death, or apparent external death.

"We ought never to conclude that real death has taken place, until the operation of the chemical powers has begun to produce decompoſition and putridity. It is on theſe alone that we can eſtabliſh any certain ſigns for aſcertaining real death, and not on deficient individual effects of the vital principle, deficient excitability, &c. Unfortunately, therefore, we have no ſign of death, on which greater dependance can be put, than corruption, until we ſhall be able to diſcover the commencement of the free activity of

of the chemical powers, which takes place before it is perceptible to us by external ſigns.

"Every thing that has been ſaid of the vital principle may be applied to life. Life is a product of the vital principle, depending on the ſtate of the organization and external ſtimulants. We cannot properly call it, as Brown does, a forced ſtate; ſince it is as free as the vital principle, though it cannot exiſt but under certain conditions.

"The different degrees of life are as thoſe of the vital principle. Its ſtrength or feebleneſs depends on the quantity and activity of the vital principle.

"The quantity and activity of the vital principle are not always in the ſame ratio. A great deal of life may exiſt where the activity of the vital principle is ſmall, and irritability weak. On the other hand it is poſſible that, with a high degree of vital activity, life may be exceedingly feeble. This is immoderate, diſeaſed vital activity and irritability, which often manifeſt themſelves a little before death, and by which the ſmall quantity of the vital principle ſtill remaining is ſoon exhauſted. The only proof of a great deal of life is a continual uninterrupted activity of the vital principle, without being exhauſted. Thus people in the years of youth, can, without injury to their powers, undertake very ſevere labour.

"For this purpoſe a great ſuſceptibility of the organization for the vital principle is required; and conſequently ſolid, irritable fibres; theſe muſt,

"1. Have the property of being eaſily acted upon by the vital principle.

"2. Muſt be durable enough to bear the continued impulſe of ſtimulants.

"The organization loſes both theſe in old age; and hence ariſe inſenſibility, weakneſs, and rigidity."

The ſecond part is entitled Aſthenocomic, or the means of maintaining and ſupporting feeble life; it concludes with the treatment of the ſo called incurable diſeaſes, and the means of palliating urgent ſymptoms; ſuch as pain, lethargy, heat, thirſt, diarrhœa, cramp, &c. &c.

Our readers will readily perceive how much Dr. S. is indebted to the Brunonian Theory, and he does not wiſh to conceal it. He ſays, "He found ſomething good in the work throughout; and he conſidered it his duty to make uſe of it."

Practical Obſervations on the Cure of the Gonorrhœa Virulenta in Men. By THOMAS WHATELY, Member of the Royal College of Surgeons in London. 8vo. pp. 19. Price 2s. 6d. London, 1801, Johnſon, &c.

THE Author ſupports the generally received opinion reſpecting the identity of the Virus of Gonorrhœa and Chancre, in oppoſition to Mr. B. Bell, &c. and then proceeds to aſcertain the ſeat of gonorrhœa in men.

"The

"The gonorrhœa virulenta in men was ſuppoſed by many of the old writers, to be a diſeaſed ſecretion from the proſtate gland, the veſiculæ ſeminales, and Cowper's glands; but diſſections by later ſurgeons have demonſtrated, that the ſeat of this diſeaſe is in the urethra, and generally within two inches of its extremity, from which iſſues a diſcharge of a yellowiſh or greeniſh purulent matter. This diſcharge is produced by an inflammation, excited by the action of the venereal poiſon, on the inner membrane of this part of the urethra. The diſeaſe is ſometimes, but not always, attended with a chordee, ardor urinæ, &c. This variation is evidently owing to a difference in the degree of inflammation, and eroſion of the ſurface of the urethra, in ſuch caſes.

"As it will be of conſiderable importance, in the treatment and cure of this complaint, to aſcertain the exact effects produced by the poiſon on the urethra, in all the different varieties of the diſeaſe, I ſhall endeavour to point them out. It has been believed, that the gonorrhœa aroſe moſt frequently from ulcerations in different parts of the urethra, or the glands adjoining to it; but the reſearches of modern anatomiſts ſeem very nearly to have overthrown this opinion, and it has of late been aſſerted, that an ulceration of the urethra never takes place in this diſeaſe. This doctrine appears to have been firſt advanced about the year 1750, by that celebrated anatomiſt the late Dr. Wm. Hunter, who taught it in his lectures. But although it is certainly true, that in moſt inſtances of gonorrhœa there is no ulceration of the urethra, it is equally certain that this is not univerſally the caſe, as ſuch a diſeaſe does ſometimes, though rarely occur.

"In my own practice I have in a common gonorrhœa, now and then, met with ulcers in the urethra. Where its orifice has been naturally wide, I have ſeveral times diſtinctly ſeen them, both a little within, and at the extremity of this canal. In a few other caſes, I have had no doubt, but that ulcers have exiſted in the urethra, within about half an inch of its external orifice, although I have not been able to ſee them. This opinion is founded on the great hardneſs of the part, (far exceeding that which would ariſe from an inflamed mucous gland) on the violence of the inflammation and diſcharge, and on finding the diſeaſe yield to no remedy but mercury given internally, or uſed in frictions. The ulcers in the urethra, which I have been able to inſpect, have been of two kinds; namely, ſuch as were in a painful corroſive or ſpreading ſtate, and attended with an adjoining hardneſs and inflammation; and ſuch as were in an indolent ſtate, with very little hardneſs or inflammation around them. It cannot therefore be doubted, but that the ſame variety exiſts in other caſes, where, from the ſmallneſs of the orifice of the urethra, the fact cannot be aſcertained by inſpection."

Mr. W. ſupports this opinion by quotations from Wiſeman, Aſtruc, Swediaur, Bell, and Monro, and then continues:

"Having, I hope, given ſufficient proofs of the exiſtence of chancres, or ulcers, in the urethra, the above extracts ſhall be followed by a ſhort one, from a very valuable and uſeful publication.

cation.—" Ulcers are alſo ſeen occaſionally in laying open the " urethra, but theſe are not frequent."†

" Where neither of the kind of ulcers before mentioned exiſts in the urethra, there is certainly a conſiderable difference diſcernable, in the depth to which the poiſon penetrates into, or excoriates the inner membrane of the urethra, in different caſes of gonorrhœa. Where a chordee and ardor urinæ take place to a conſiderable degree, and are attended with an exceſſive diſcharge, of a greeniſh purulent nature, and a conſiderable tenſion and inflammation along the courſe of the urethra, the venereal poiſon inſinuates itſelf deeper into its inner ſurface, (and particularly into the lacunæ) than in thoſe caſes where theſe violent ſymptoms do not occur, and where only a moderate yellowiſh diſcharge takes place. I have frequently perceived this difference by the eye; and I have no doubt of its being always diſcernable, were it poſſible to ſee the whole of the affected ſurface of the urethra.

" As the ſpurious or external gonorrhœa is a diſeaſe of a very ſimilar kind to that which is ſeated in the urethra, we may, with great propriety, illuſtrate by it ſome of the varieties of the latter diſeaſe. Sometimes the gonorrhœa ſpuria is attended with large and deep ulcers upon the prepuce or glans, with much inflammation and hardneſs. At other times with thoſe which are ſmall, and with a leſs degree of inflammation and hardneſs. In ſome caſes the poiſon inflames the tender ſkin and ſubjacent parts of the glans and prepuce, to ſuch a depth, as to thicken and enlarge them; but without producing diſtinct ulcers. In all theſe affections, a conſiderable ſecretion of a greeniſh or yellow pus takes place. In other caſes, the excoriation of the ſurface is merely ſuperficial, and without any thickening. The inflammation is alſo ſo ſlight as to occaſion a ſmaller ſecretion of pus, of a lighter colour than in any of the other kinds of this diſeaſe.

" Towards the more complete inveſtigation of this ſubject, it will be of uſe to obſerve, that the gonorrhœa virulenta in general affects the urethra partially; either in irregularly ſhaped patches, which are connected with each other, or in diſtinct inflamed ſpots, which ſecrete the purulent matter. I have ſometimes been able to ſee theſe appearances juſt within the orifice of the urethra. Similar appearances are more diſtinctly ſeen in the gonorrhœa ſpuria, the thin cuticle on the glans or prepuce being in this caſe eroded by the poiſon. At the beginning of the diſeaſe, when the glans is naturally covered by the prepuce, an eroſion of any particular ſpot, either on the glans or prepuce, generally produces one, of a correſponding ſize and ſhape, on the part uſually in contact with it. Sometimes this appearance takes place in a number of diſtinct ſpots at the ſame time; ſo that there appear between them irregular portions of ſound cuticle. If the diſeaſe in this ſtate be neglected, the eroſion generally goes on, till the whole of the cuticle on the glans and prepuce is deſtroyed; but if the parts be waſhed only with ſimple

† Dr. Bailie's Morbid Anatomy.

ſimple water, it is uſually checked in its progreſs. I have no doubt, but that the gonorrhœa vera ſpreads alſo along the inner membrane of the urethra, by the contact of its diſeaſed ſide with the oppoſite ſound ſide; and that it would ſpread in this manner, in a ſhort time, from one end of the urethra to the other, were it not checked by the repeated ablutions of the urine."

Mr. W. in his third chapter, examines the proofs of the diverſity and eſſential difference between the poiſon of gonorrhœa virulenta, and that of the lues venerea, or ſecondary ulcers.

" From what has been advanced, there is reaſon to conclude, that the virus of a chancre, though partaking of the ſame ſpecific property, yet, nevertheleſs, differs conſiderably in its quality from that of an ulcer from a ſecondary infection. Hence we infer, that the poiſon of a bubo is nearly of the ſame kind as that of a chancre; inaſmuch, as being mixed only with a ſmall quantity of lymph in its paſſage to the gland, it has not undergone the ſame change, which it does from a long circulation, and a ſubſequent depoſition from the blood: And experience confirms the truth of this remark; buboes being known to be generally obſtinate and difficult of cure; and when they take place in a perſon afflicted with chancres, they require the ſame quantity of mercury, and the ſame degree of the affection of the mouth, as are neceſſary to cure the chancres.

" If this difference exiſts, between the poiſon of a chancre or a bubo, and that of the lues, we may ſafely conclude, that it exiſts alſo between the poiſon of the gonorrhœa virulenta, and the lues. I ſhall not, therefore, take up my reader's time, in endeavouring to prove this; for if the truth of the former be eſtabliſhed, the latter muſt likewiſe follow; if it be granted, that the poiſon of a gonorrhœa, and that of a chancre, are the ſame. From theſe elucidations of the nature, ſeat, and properties, of the gonorrhœal poiſon, we proceed to the method of treating this complaint.

" From what has been advanced in the preceding pages, it may be ſuppoſed, that the cure of the gonorrhœa virulenta would be found to be ſimple and eaſy; that as mercury, exhibited internally in a proper manner, or uſed in frictions, is known almoſt always to cure a chancre or a bubo, it would, if exhibited in a like manner, cure every ſpecies of this diſeaſe. But in ſuch an expectation we ſhall be diſappointed; for, though mercury, thus introduced into the circulation, will be found, in certain caſes, to have a very conſiderable effect towards removing the diſeaſe, yet it will ſeldom entirely eradicate it, without the aſſiſtance of other remedies.

" I ſhall divide this diſeaſe into three different ſpecies.

" Firſt, The gonorrhœa attended with ulcer in the urethra, or with a conſiderable induration of the lips of its orifice, and of a portion of the corpus ſpongioſum adjoining, but without any apparent ulcer. Theſe appearances being for the moſt part attended with a chordee, and ardor urinæ, to a greater or leſs degree.

" Secondly,

" Secondly, The gonorrhœa attended with a chordee and ardor urinæ, with other marks of a conſiderable inflammatory affection of the urethra and penis, but without any appearance of ulcer, or great induration of the lips of the orifice of the urethra, or of the corpus ſpongioſum.

" Thirdly, The gonorrhœa unattended with any of theſe circumſtances; its chief ſymptom being a ſmall purulent diſcharge from the urethra."

The author then proceeds to lay down the treatment proper for each of theſe ſpecies, and their varieties; but our limits do not permit us to enter into this detail, and we muſt therefore refer our readers to the work itſelf.

We conclude, though merely from conjecture, that this pamphlet is only a firſt part of a complete work on this ſevere puniſhment of vicious and ſenſual indulgences.

A ſhort Account of the Royal Artillery Hoſpital at Woolwich, with ſome Obſervations on the Management of Artillery Soldiers, reſpecting the Preſervation of Health. By JOHN ROLLO, M. D. Surgeon General, Royal Artillery, &c. 8vo. pp. 173, price 5s. London, Mawman.

OUR readers muſt long have been acquainted with the name and merits of Dr. Rollo, from his Works on Diabetes, and the Uſe of Acids in the Cure of Syphilis. The above correct, uſeful, and philanthropic Compendium of Military Hygieine and Therapeia, does in no reſpect derogate from his former fame.

We do moſt earneſtly recommend theſe Obſervations and Directions to all Officers in the Army, as well as to thoſe to whom it is particularly addreſſed, in the Royal Regiment of Artillery.

A Concise View of all the most Important Facts which have hitherto appeared concerning the Cow-pox. By C. R. AIKIN, Member of the Royal College of Surgeons in London. 12mo. pp. 102, price 2s. 6d. London, 1801, R. Phillips, &c.

THIS practical Manual appears to us to be admirably calculated to anſwer the wiſhes of Country Practitioners, and Surgeons in the Navy and Army; and as the ſale is very extenſive, and new editions are intended to be given frequently, in order that the lateſt and moſt accurate information may at all times be found in it; we take the liberty of ſubmitting the following Hints for the next edition.

1ſt. A new plate.

Page 19. On the Origin of the Cow-pox as derived from the Horſe, Mr. A. has not mentioned the ſimilarity of the equine and vaccine puſtule, nor the ſecurity the conſtitution receives from the inoculation of equine fluid.

Page 23, line 13, for, *is not* rendered thereby, &c. read, *has been* rendered, &c.

Page 38, line 10, formation of *matter*, read, formation of a *veſicle*, or let the term *matter* be explained.

Page

Page 39, line 5, " rendered much milder by *inoculation.*" The Cow-pox cannot be communicated by any other means than those of *inoculation*, and therefore no comparison between the Small-pox and Cow-pox can be admitted on that ground. See p. 44, 45.

Page 57, line 9, and page 58, line 5, &c. This advice is too general, and requires to be more accurately and pointedly circumscribed.

Page 66, line 8. The constitution is most commonly affected on the fourth and fifth days.

Page 75, line 10, &c. and note, page 76. There are no pustular cases resembling Small-pox, derived from real Vaccine fluid.

Page 99, line 17. " Dr. Jenner's able *investigation.*" It is but an act of justice due to the public and Dr. Jenner, that every writer on this subject, especially in this country, should declare unequivocally and explicitly, that Dr. Jenner is entitled to the admiration and reward of a grateful public, not merely for investigating the nature of a known disease, but for conceiving and perfecting the important idea of employing that disease, divested of its severity by art, to supersede and finally annihilate the Small-pox. All foreigners have hitherto done him this justice.

T. B.

The number of popular Treatises on the Cow-pox, in all European languages, increases so fast, that we can do little more than detail their titles.

Familiar Observations on the Inoculation of the Cow-pox, as now very generally introduced in Great Britain, and several parts of the Continent; with a View to the final Extirpation of Small-pox. By ALEX. HERMAN MAC DONALD, M. D. 4to. pp. 50. Hamburgh, 1800.

WE have no hesitation in recommending this correct and impartial work to the attention of our countrymen, though compiled from our own materials, and published at a considerable distance from the source of the most recent information.

Evidences of the Utility of Vaccine Inoculation; intended for the Information of Parents. Dedicated, by permission, to the Right Hon. Lord Somerville. By THOMAS CREASER, Member of the Royal College of Surgeons. 12mo. pp. 36, price 1s. Bath, 1800, Crutwell.

THE Author, who appears to have directed his attention to this subject from its first establishment as a branch of medical science, says,

" Little more than two years have elapsed, since Dr. Jenner announced to the public, the singular, curious and beneficial effects of Vaccine Inoculation. His conclusions were formed from experiments suggested by facts founded on the unerring basis of experience. From this source we have derived the application of bark, mercury, opium, and almost all the most powerful agents of medical

dical ſcience. Extenſive and impartial trials of the truth of Dr. Jenner's poſitions were immediately inſtituted, and they have been proſecuted with avidity by men of the firſt talents, independent of concert or co-operation. The reſult is, that although the Inoculation of the Cow-pox is one of the boldeſt and moſt direct innovations on preceding practice, and, as ſuch, has had to encounter all the impediments which are uſually oppoſed to novelty, by the operations of ſcepticiſm, prejudice, and intereſt; yet its aſſerted and almoſt unparalleled advantages have been realized in their higheſt extent, by a maſs of irreſiſtible evidence. It is truly extraordinary, that in a meaſure ſo perfectly original, and which has been ſo immediately ſubmitted to the teſt of extenſive experiment, ſubſequent inveſtigation ſhould have tended merely to confirm the poſitions of the original propoſer. It is a law of the human mind to prefer good to evil, provided it be competently informed of their difference, and that it is not under the influence of erroneous judgment or habits. Of the quantity of evidence exiſting to demonſtrate the highly preferable nature of the Vaccine to the Small-pox Inoculation, the public want only acceſſible means of information.

"It will be neceſſary previouſly to enter into the hiſtory of the natural Cow-pox, as diſtinguiſhed from the ſame diſeaſe when applied by inoculation, and as the origin of the latter. The cow, though in general a healthy animal, is ſubject to this and a few other diſeaſes.

If, in a popular work, we may be allowed to digreſs a little into the pathology of animals, it may be obſerved, as a curious fact, that their prediſpoſitions to diſeaſe are of the ſpecific kind. The horſe is liable to broken-wind, farcy, glanders, and greaſe, excluſive of ſome local diſeaſes, the greater number of which do not ariſe from original or natural cauſes, but from the unnatural and violent ſituations to which he is expoſed, whilſt adminiſtering to the utility and luxury of man. The ſheep is diſpoſed to the diſeaſe termed the rot, and to hydatids of the brain. The dog to its peculiar affection called the diſtemper, to mange, and hydrophobia. The cow is particularly liable to the diſeaſe of which we are treating, and to the yellows, which are ſimilar to the human jaundice. Much phyſiological conſideration ariſes out of theſe obſervations; not only the morbid ſecretions of the ſame animal are capable of converſion and mutual change, but alſo the ſame morbid poiſon, applied to different animals, ſeems to produce not a ſimilar and ſpecific diſeaſe, but the diſeaſe to which the animal, from conſtitution and ſtructure, is pre-diſpoſed. It is now confirmed, according to Dr. Jenner's original theory, that the Cow-pox originates in a morbid poiſon communicated from the greaſy heel of the horſe; yet this poiſon does not produce the Cow-pox in the human ſubject, till it has been received by, and tranſmitted from, the cow. My friend Mr. Coleman, Profeſſor of the Veterinary College, has created glanders by inoculating the membrane of the noſtrils of the horſe from its farcy buds, as they are termed; i. e.

i. e. inflamed and ulcerated lymphatics; the same effect took place, *vice versa,* from glanders to farcy; and, which is truly singular, Dr. Jenner informs me, that dogs, inoculated with vaccine matter, acquire their peculiar affection, termed the Distemper. These speculations lead us to a vast field of consideration concerning the modifications of morbid poisons, and they teach us also not to regard the introduction of them as hazardous on another class of animals, when they become remedial alternatives."

This is a beautiful little work, and admirably calculated to answer the views of the enlightened Author.

Memoire sur l'Inoculation de la Vaccine a Geneve, par L. ODIER, Dr. & Prof. en Medicine; 8vo. pp. 30.

THIS excellent pamphlet describes several kinds of eruptions which may occasionally take place during the progress of the Vaccine Inoculation, but not essentially connected with it.

Essai sur l'Inoculation de la Vaccine, ou moyen de se preserver, pour toujours et sans danger de la petite Verole; par F. COLON, M.D. 8vo. pp. 36. Paris.

THAT our Readers may see in more lights than one, the ardour with which the new Inoculation is pursued in France, we present them with a translation of this Author's Introduction.

" However astonishing the discovery of the Vaccine Inoculation may appear, and although the English have enjoyed the benefits of it for upwards of two years with the greatest success, its benefits are, nevertheless, scarcely known in France.

" It is well known that about the commencement of the last autumn, M. Larochefoucault Liancourt proposed to open a subscription for defraying the expences necessary to make proper trials of the Vaccine Inoculation, and to decide on its preference to that of the Small-pox. This proposition of M. Liancourt was cordially received by many benevolent individuals: In a short time a fund was raised adequate to the object proposed.

" A medical committee was appointed to verify the phænomena which precede, accompany, and follow the Vaccine Inoculation.

" To hasten as much as possible the issue of these proposed trials, I offered my house at Vaugirard, where forty could be constantly under inoculation without the possibility of any extraneous influence on the progress of the disease.

" In thus paying my tribute to the discovery which at present engrosses the attention of the medical world, I acquired an opportunity of observing its success, and of being able to speak of it with some degree of knowledge.

" I by no means propose here to enter into minute details, or to write as a member of the medical committee on the Vaccine Inoculation: My individual opinion has nothing in common with the relation in which the committee is bound to the public. They will,

will, no doubt, ſpeedily publiſh the reſult of their experience,* and will ſatisfy the expectations and confidence of profeſſional men and the public at large; but having inoculated the Vaccine at Paris, amidſt the clamours of a party that wiſhed to oppoſe its propagation, I owe it to thoſe perſons who have honoured me with their confidence, to lay before them the facts which have determined my conviction, that this new Inoculation merits the preference over the old.

I pretend to no more than to give a general knowledge of the Vaccine and its advantages, to the end that thoſe who are not of the profeſſion, as well as young phyſicians who have not been able to purſue the experiments made in my houſe, might yet be able to form juſt ideas, by which they will be able to confute the lies, and the abſurd clamour raiſed againſt this method by intereſted men, or thoſe who know nothing of the matter.

" I ſhall endeavour, above all, to ſteer equally clear of blind credulity, which adopts every thing, and that intereſted and party ſpirit, that would oppoſe nature herſelf, as well as the progreſs of uſeful knowledge.

" It was in effect this ſpirit of party, which on the firſt introduction of the Vaccine, raiſed the cry of *innovation*, and ſounded the *tocſin* of prejudice againſt trials, which had for their object, a concern as important as any within the ſcope of medicine.

" It required the conſtancy, the ſpirit of wiſdom which directs the medical committee to reſiſt theſe clamours, which are only a repetition of the attempts made in the laſt century to prevent the introduction of Inoculation into France.

" There was, undoubtedly, prudence and good ſenſe in retaining their judgment on a ſubject of this importance, till the committee, by its report, had freed the ſubject from all difficulties; but jealouſy alone, and obſtinacy, were able to give birth to ſuſpicions on the validity of experience itſelf, and on the motives which actuated men, who, from a zeal truly laudable, make perſonal ſacrifices to examine and verify the trials of the Vaccine Inoculation.

" In this eſſay I ſhall explain what the Vaccine is, the varieties of which it is ſuſceptible, and the advantages it poſſeſſes over the common Inoculation. I ſhall anſwer various objections which I have heard from thoſe who wiſh to throw obſtacles in our way; and I ſhall conclude with a comparative table of the effects of the inoculated Small-pox and the Vaccine."

This ſhort work performs all it promiſes, and muſt have produced a conſiderable effect in removing the prejudices of the Author's countrymen.

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* See page 356.

Comparative View of the Theories and Practice of Drs. Cullen, Brown, and Darwin, in the Treatment of Fever and of Acute Rheumatism. By H. Xavier Baeta, M.D. 8vo. pp. 55, price 1s. 6d. London, Johnſon.

Dr. Cullen's Spaſmodic Theory of Fever is familiar to every practitioner: See his Firſt Lines, § 46, &c.

Dr. Brown's Theory of Fever is thus ſtated by Dr. Baeta.

" Dr. Brown ſuppoſes the proximate cauſe of fever to conſiſt in debility (Elem. of M. par. 679) which may be either direct or indirect, according to the nature of the noxious powers which were previouſly applied to the ſyſtem. (Elem. of M. par. 681) Hence he makes two diviſions of fevers;—1ſt, Thoſe which depend on direct debility: in this he ranks ſome intermittent fevers, the typhus mitior and gravior, the plague, &c. (Elem. of M. par. 685, 6)—2d, Thoſe which depend on indirect debility: under which diviſion he ranks ſome intermittents, and ſome continued fevers, occaſioned by drunkenneſs, the confluent ſmall-pox, &c. (Elem. of M. par. 687) Hence he forms two indications in the cure of fevers, juſt according to thoſe diviſions for removing direct and indirect debility, (Elem. of M. par. 103—110) viz. In fevers dependent on direct debility, he recommends diffuſible ſtimuli in ſmall doſes, and often repeated; (par 686) in thoſe dependant on indirect debility, he orders the largeſt doſes of ſtimuli. (par. 687.)

In ſtating Dr. Darwin's Doctrine of Fever, the author premiſes a few obſervations or principles, viz.

" Before we enter into the conſideration of this doctrine, we ſhall lay down ſome principles deduced from the Zoonomia.

" 1ſt. There is in every part of the animal ſyſtem a living principle, which is termed ſenſorial power, and which is conſidered as the immediate cauſe of all its motions (Zoon. part i. ſect. 4.) This is ſuppoſed to be ſecreted in the brain and ſpinal marrow, (Zoon. part i. ſect. 12, 2, 1.)

" 2d. This living principle is capable of being acted upon in four different ways, viz. it poſſeſſes four different faculties or modes of action, which in their inactive ſtate are called irritability, ſenſibility, voluntarity, and aſſociability; and in their active ſtate, or while they are exerted, they are termed irritation, ſenſation, volition, and aſſociation. (Zoon. vol. i. ſect. 5.)

" 3d. The faculty of that living principle, which is termed irritability, is exerted in conſequence of the ſtimulus of external bodies acting on any part of the ſyſtem where ſenſorial power reſides, and it then may produce fibrous motions. That of ſenſibility is exerted in conſequence of the ſtimulus of pleaſure or pain, occaſioned by the fibrous motions produced by the ſenſorial power of irritation at firſt. That of voluntarity is exerted in conſequence of the ſtimulus of deſire or averſion, occaſioned by the fibrous motions produced by the ſenſorial power of ſenſation at firſt. That of aſſociability is at firſt exerted in conſequence of the ſtimulus

lus of any fibrous motions, previously occasioned either by irritation, sensation, or volition. (Zoon. vol. i. sect. 4 and 12.)

"4th. During the application of any of these stimuli, (Prin. 3d,) the living principle, or sensorial power, becomes exhausted; on the contrary, during the subduction of any of these stimuli the sensorial power becomes accumulated.

"5th. There are various circles of associate motions in the animal system, which may take their names from the nature of their introductory link: that is, those circles, the introductory link of which consists of an irritative motion, may be termed circles of irritative associate motions: those, the introductory link of which consists of a sensitive motion, circles of sensitive associate motions; and lastly, those, the introductory link of which consists of a voluntary motion, circles of voluntary associate motions. (Zoon. vol. ii. Class IV. 1, 1, B.)

"6th. The links of each of these circles act on one another by means of the sensorial power, which in its inactive state is called sensorial power of associability, and in its active state sensorial power of association. (Zoon. vol. i. sect. 5.)

"7th. These circles of associate motions may be affected by other sensorial motions, occasioned by the sensorial powers of irritability, sensibility, and voluntarity. (Zoon. vol. ii. Class IV. 1, 1, D.)

"8th. Each of these great circles of associate motions may be considered as compounded of smaller circles, that is, the great circle of irritative associate motions may be looked on as a collection of smaller circles of the same kind. (Zoon. Supl. 1st. 6.)

"9th. The introductory link of any circle of associate motions, may have its action increased, or decreased, or in its natural degree. The first may take place either in consequence of excess of sensorial power, the stimuli being in their accustomed degree; or, in consequence of excess of stimuli, the sensorial power being in its natural degree; or in consequence of excess of both. The second may arise either from want of sensorial power, the stimulus being in its usual degree; or from subduction of stimuli, the sensorial power being in its natural quantity; or from want of sensorial power, and subduction of stimuli. The third takes place, when both the sensorial power and the stimuli are in a proper degree.

"10th. Sometimes the morbid increased, as well as the morbid decreased, actions of the introductory link of a circle of associate motions are followed by similar actions of the other links; at other times by contrary actions: in the first case we have direct, in the second indirect sympathy. (Zoon. vol. i. sect. 35, 1; and vol. ii. Class IV. 1, 1, F.)

"11th. The morbid decreased actions, which arise from subduction of stimuli, are sooner overcome than those which are occasioned by want of sensorial power. (Zoon. vol. ii. Sup. 1, 12, 10.)

"12th. The morbid increased actions, which arise from excess of sensorial power, are more violent than those which are produced by

by exceſs of ſtimuli. Hence inflammatory diſeaſes are commonly preceded by ſubduction of ſtimuli, and conſequent accumulation of ſenſorial power, &c. But when exceſs of ſenſorial power is acted upon by exceſs of ſtimuli, the exertion which follows is far ſuperior. Hence mortification of frozen limbs, when brought near the fire. (Zoon. vol. ii. Claſs III. 2, 1, 17.)

"13th. Thoſe parts which are ſubjected, during health, to perpetual action, as the heart and arteries, accumulate ſenſorial power faster, when their motions are impeded, than thoſe which are ſubjected to intermitted action. (Zoon. vol. ii. Supl. 1, 3, 1.)

"14th. When ſtimuli, which are uſually applied to a certain part of the ſyſtem, are ſubducted from it, an accumulation of ſenſorial power takes place there, proportioned to the ſubduction of thoſe ſtimuli, and to the ſtate of that part.

"15th. The exertion of any part of the ſyſtem may be either proper or greater, or ſmaller than it ought to be; and ſo either health, or inflammation, and the various degrees of exhauſtion of ſenſorial power, or torpor from accumulation of ſenſorial power, will enſue.

"16th. Fever conſiſts of one or more diſordered trains or tribes of aſſociated motions. (Zoon. vol. ii. Claſs II. 1, 2) Hence fever will be more or leſs complicated, according to the number of the tribes diſordered.

"After theſe principles, Dr. Darwin's doctrine of fever may be conſidered as follows: When the torpor of any part of the ſyſtem, owing to deficient irritation, occaſioned either by the ſubduction of the natural ſtimuli, and conſequent accumulation of ſenſorial power, or by the application of powerful ſtimuli, and conſequent exhauſtion of the ſame living principle (Prin. 4th, 7th, and 14th) is ſuch as to occaſion decreaſed actions of that part, what happens? The next link of the tribe of aſſociate motions falls alſo into a torpor, from defect of excitement of the ſenſorial power of aſſociation, and ſo the ſubſequent one, till a general torpor affects the ſyſtem. This conſtitutes the cold paroxyſm of fever. This general torpor remains, till the accumulation of the ſenſorial power of aſſociation has been formed, which may overbalance that defect of excitement of aſſociation, and then the torpor ceaſes, and the hot fit of fever is produced.

"When the torpor of the part firſt affected is occaſioned by the ſubduction of the natural ſtimuli, this part is likewiſe thrown into increaſed actions during the hot fit. But if it ariſe from exhauſtion of ſenſorial power, this part remains in a torpid ſtate during the hot fit. (Prin. 11)

"The torpor induced by the ſubduction of the natural ſtimuli, as it is overcome at the end of the cold fit, (Prin. XVIII) always gives riſe to fevers with ſtrong pulſe; ſince in this caſe all the parts of the ſyſtem have their actions increaſed during the hot fit. (Prin. 12)

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"The torpor induced by the exhaustion of sensorial power produces various effects, according to the part in which it takes place. When it takes place in the stomach, it is always a cause of continued fever with weak pulse. (Zoonomia, vol. ii. Supl. 1. 16. 9) In this case, in consequence of the torpid state of the stomach, the arterial system falls likewise into a torpor, from defect of the excitement of the sensorial power of association; (Princ. 6 and 10) therefore an accumulation of this sensorial power of association takes place in the arterial system: but this accumulation is so great, owing to the perpetual actions of the stomach catenated with those of the arterial system, (Princ. 13) that it affects the next link of the associate train, that is, the capillaries, with increased energy. (Princ. 10) Hence these last, in this kind of fever, are perpetually exerted with great increase of action.

"When this torpor affects the secerning vessels of the brain, Dr. Darwin thinks, that it is a cause of fever with arterial debility. (Zoonomia, vol. ii. Supl. 1. 10) In this case, the secretion of sensorial power being more or less impaired, must occasion languid actions of every part of the system. (Princ. 1) In fevers with arterial debility, arising from this cause, the actions of the capillaries are diminished along with the actions of the rest of the system. Hence the heat of the body is never above the natural standard, and sometimes it is even lower throughout the course of the disease; which phenomenon I have observed sometimes in patients labouring under continued fever with arterial debility.

"Though Dr. Darwin does not mention the torpor from exhaustion of sensorial power in the arterial system, as a cause of continued fever with arterial debility, yet, considering that the stimulus of the blood may be more or less increased, in consequence of a greater or smaller quantity of oxygen, I make the following query: May not the sensorial power of irritation be accumulated for a while in the arterial system, by the subduction of the stimulus oxygen? And afterwards, by a sudden application of this stimulus in a great degree, that is, by inspiring at once a large quantity of pure oxygen gas, may not a violent exertion take place there, so as to produce an exhaustion of the sensorial power of irritation, and to render the arterial system unfit to derive from the brain and spinal marrow a proper quantity of sensorial power, (See note (*l*) Princip. 11.) which may therefore give rise to a fever with arterial debility?

[To be continued.]

MONTHLY

MONTHLY REPORT of DISEASES,

Admitted under the Care of the PHYSICIANS of the FINSBURY DISPENSARY, St. John's Square, Clerkenwell.
From Feb. 20, to March 20, 1801.

	No. of Cases.		No. of Cases.
Chlorosis and Amenorrhœa	25	Infantile Diseases - - -	32
Menorrhagia - - - -	8	Anasarca - - - - - -	9
Diarrhœa - - - - -	17	Cephalæa - - - - - -	2
Cough and Dyspnœa - -	45	Epilepsy - - - - -	6
Phthisis Pulmonalis - -	3	Hysteria - - - - -	3
Cynanche Tonsillarum -	5	Asthenia - - - - - -	48
Erysipelas - - - - -	16	Hypochondriasis and Dyspepsia - - - - - -	39
Continued Fever - -	27		
Chronic Eruptions - -	21		

The cases of amenorrhœa constitute a considerable proportion in the above list. In a disease which is characterized by a general debility, and seldom attended by local inflammation, it is much to be wondered at, and to be lamented, that physicians should have such frequent recourse to the remedy of blood-letting; which cannot fail, by weakening still farther, to aggravate all the morbid symptoms it was intended to alleviate.

By no means is it uncommon for repeated venesections in such cases to occasion an effusion upon the lungs, which soon terminates the sufferings, by terminating the existence of the patient.

That relaxation of body, that irritability and dejection of spirits, and those various pains and uncomfortable feelings with which the young chlorotic female complains of being afflicted, are not to be relieved by bleeding, or any kind of lowering evacuants; but, rather by the assiduous application of those mental and physical stimuli, the direct tendency of which, is to induce a state of universal vigor and excitement.

Out of the great number of patients afflicted with this complaint, that have come under the care of the Reporter during the last fifteen months of his practice at the Dispensary, he recollects scarcely a single instance, in which steel, in some shape or other, did not in a longer or shorter time, accomplish the object which he had in view.*

Cases

* To some it may seem remarkable, that so many casts of amenorrhœa should have fallen within the sphere of Dispensary practice, as this is a disease that is, comparatively, seldom observed amongst the lower classes of society; it is therefore necessary to state, that although a considerable number of our patients are from amongst almost the poorest of the community, there is still a large proportion of them, who, living as domestics in opulent families, share in the luxuries of their superiors, and of course, in common with them, experience all the bad effects of good living. Besides, it is not singular for governors of the charity, who are in a decent and even rather in

Cafes of fevers have confiderably decreafed in number during the laft month, whilft catarrhal and afthmatic affections have been much more extenfive in their prevalence, as well as troublefome in their fymptoms. In thefe complaints, efpecially when they attack the aged, little is to be done either by the apothecary's art, or by the fkill of the phyfician; an accurate attention to *clothing* and *diet* is almoft all that can with advantage be recommended, unlefs in-indeed a change of air, which, however, amongft the lower claffes, is feldom practicable. The writer of this article has more than once feen a perfon, at an advanced period of life, afflicted with thefe catarrhal and afthmatic affections, fuddenly deprived, by the mercilefs hand of an empirical practitioner, of almoft all the few drops of blood that ftill lingered in his withered and nearly exhaufted veins. The diftended and over-charged veffels of the vigorous and the young may admit, and fometimes even require, a partial evacuation of their contents. But to take from an emaciated old man, bent under the weight of years, any part of that vital fluid, with which he is fo fcantily provided, is an act that would never be rafhly committed by any difcerning or intelligent practitioner. Fewer murders, perhaps, have been perpetrated by the fword than by the lancet. Next to the vaft fcythe of Time, fcarcely is there any weapon that has committed more cruel ravages than thofe which have been effected by this powerful, although minute inftrument of deftruction.

The inftances of hypochondriafis, recorded in our lift of difeafes, have in general occurred at an advanced period of life. There are few perfons indeed at an advanced period of life, in whom we may not detect, in a greater or lefs degree, the fymptoms of this difeafe. Objects in general, having loft in a good meafure their power of interefting, being no longer entertained by the amufements, nor engaged earneftly in the ferious occupations of life, and moft of thofe focial connections being broken which tended fomerly to divert his attention from himfelf, it is no wonder that the mind of an old man fhould often become occupied almoft entirely by the daily increafing infirmities of his body.

This will be ftill more likely to occur in thofe cafes where a perfon has been fo unfortunate as, in the earlier periods of his life, to expend in licentious and enfeebling pleafures, the whole of that corporeal vigor, part of which ought carefully to have been referved for the comfort and the fupport of age. A remark which might be illuftrated by the inftance of a celebrated perfonage in facred ftory, who, after having exhaufted the powers of his con-

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an affluent condition, to convert the privilege which their annual fubfcription affords them, to the relief of their own wives and children, as well as of other friends, who ftand on the fame level of life with themfelves! A circumftance which, although in various refpects highly conducive to the advantage of a young practitioner, cannot but appear glaringly inconfiftent with the nature and object of a charitable inftitution.

ſtitution, by that unlimited debauchery to which his youth and manhood were devoted, at length complains, in the true temper of an hypochondriac, that—"*All is vanity and vexation of spirit.*"

Red Lion Square. J. R.

MEDICAL AND PHYSICAL INTELLIGENCE.

[FOREIGN AND DOMESTIC.]

Extract of a paper on the genus of Lime-tree (Tilia), read at the National Inſtitute, by VENTENAT.

LINNÆUS has mentioned in his Species Plantarum, only two ſpecies of lime-tree, to which he gave the name of *Europaea* and *Americana*; but as there are more diſtinct ſpecies of this tree to be met with in Europe as well as in America, thoſe names cannot conveniently be retained, becauſe one might ſuppoſe by them, that the other ſpecies do not grow in Europe or in America.

Miller, in his Gardener's Dictionary, deſcribes two American ſpecies of lime-tree, retaining the name of *Americana*, for that which was known to Linnæus, and aſſigning to the other, brought from Carolina by Cateſby, the name of Caroliniana; but this cannot likewiſe be adopted, ſince *Michaux* and other botaniſts have diſcovered in Carolina, another ſpecies of lime-tree, different from that found by Cateſby. Mr. Aiton, in his Hortus Kewenſis, has probably changed, on that account, the name of *Caroliniana* into that of pubeſcens. Mr. Walther diſtinguiſhes a ſpecies of lime-tree, native of Carolina, "*Tilia Americana, floribus nectario inſtructis, ſtipulis floriferis*;" but as this deſcription agrees evidently with all the lime-trees that may grow in the whole extent of America, it is obvious how difficult it would be to determine which ſpecies Walther may have meant, if the naturaliſts who travelled in Carolina had not brought with them ſpecimens of the tree, which the Engliſh botaniſt meant to characteriſe.

After having given the generic character, *Mr. Ventenat* deſcribes the following ſpecies, of which he has given figures.

Lime-trees of Europe, with naked petals.

Tilia microphylla.—Foliis cordato-ſubrotundis, acuminatis, argute ſerratis, capſula ſubgloboſa, minime coſtulata, tenuiſſima, fragili. Var. fructo oblongo, utrinque acuminato, Tilli Hort. Piſan. T. 49. fig. 3.

T. platyphyllos.—Foliis cordato-ſubrotundis, acuminatis, inaequaliter

liter ſerratis, capſula turbinata, coſtis prominentibus, inſignita, lignoſa, craſſa. Var. Carolina, Ait. Hort. Kew.

Lime-trees of America ; petals provided with a ſcale, at their baſis.

T. glabra.—Foliis profunde cordatis, ſerratis, glabris ; petalis apice truncatis, crenatis, capſula ovata, ſubcoſtata (T. Americana L.)

Habitat in Virginia et Canada.

T. pubeſcens. Ait.—Foliis baſi truncatis et obliquis denticulato ſerratis, ſubtus pubeſcentibus, petalis emarginatis, capſula globoſa lævi.—T. Caroliniana Mill.

Habitat in Carolina.

Var. leptophylla, foliis tenuiſſimis, ſubpapyraceis. Habitat in Louiſiana.

T. rotundifolio.—Foliis cordato-ſubrotundis, ſubſinuatis, dentatis verticalibus ſubtus tomentoſis ; capſula ovata, obſcuri nervoſa. T. alba Ait. argentea Mus. nat.

Habitat in America ſeptentrionali.

T. heterophylla.—Foliis ovatis, argute ſerratis, baſi nunc cordatis nunc oblique aut æqualiter truncatis ſubtus tomentoſis, capſula globoſa, multinervoſa.

Habitat in Carolina inferiori, et in Marylandia.

Mr. Ventenat terminates this paper, by preſenting ſome obſervations on the culture of the ſpecies of this genus, on the ſoil that agrees with them, and on the advantages that may reſult from them to the community.

On a new Method of preparing Ice Vinegar.

It is about ten years ago that Profeſſor Lowitz, of Peterſburgh, diſcovered the cryſtallizibility of the moſt concentrated acetic acid, which, when reduced into that ſolid ſtate, obtains the name of *ice vinegar*. This high degree of concentration is chiefly attained through the medium of ſulphuric acid, with the help of a hard froſt during the winter : The proportion in which this acid was added to the acetic ſalt, according to the preſcription of Mr. Weſtendorf, is 1 : 2. Profeſſor Lowitz, however, propoſes an eaſier and more profitable method for exhibiting from wine vinegar, as well as from that of malt liquors, an ice vinegar, which is much ſuperior in ſtrength to that prepared in the former way. By taking to *three* parts of the acetic ſalt *four* parts of ſulphuric acid, from a hundred parts of the ſalt, fifty-one parts of ice vinegar will be obtained, which, when once coagulated, requires 10° Reaumur for being again liquefied. But the whole proceeding is as follows : Saturate three or four pounds of purified potaſh with wine or beer vinegar, which has been diſtilled over charcoal powder ; evaporate the ſaturated liquor to the conſiſtence of a dry powder, of which put three pounds, accurately weighed, when ſtill warm, into a glaſs, previouſly heated, and ſhut it with a glaſs ſtopper. Then pour three pounds of ſulphuric acid into a retort, provided on its upper part with a pipe, and join to it a receiver, large enough

enough for containing about twenty pints of water. Begin to add to the ſulphuric acid the above ſalt in ſmall portions, ſhaking and ſtirring it frequently. After having mixed all the ſalt, add by degrees one pound more of ſulphuric acid, and ſhut the pipe with a wet bladder; ſuffer the whole to ſtand quietly one night. The next morning place the retort into the ſand pot of a furnace, ſo deeply, that the ſand between the bottom of the pot and the retort be only about half an inch thick; put the receiver into a refrigatory filled with very cold water, after which apply a gentle fire. About one hour after, the diſtillation commences by white fumes appearing in the veſſels, at which time the fire muſt be very carefully managed. The drops that go over may ſucceed one another quickly, without any danger of the veſſels being cracked; but be very careful that no coherent ſtreams run over, and likewiſe take care that the thick and white fumes only lodge in the loweſt part of the receiver; and when they begin to riſe, particularly with a whirling motion, take the fire immediately out of the furnace. It is, beſides, neceſſary to refrigerate often the upper part of the receiver with cold water, or, which is ſtill better, with ſnow or ice. —The ending of the diſtillation is known by the diſappearance of the white fumes, by the drops running over much ſlower, and particularly by the liquefaction of the reſiduum to a black frothing fluid that goes eaſily over into the receiver. At the moment of the liquefying and frothing of that ſubſtance, the receiver ought to be taken off, and another put on, into which five or ſix drachms of a much weaker and diſagreeably ſmelling acetous acid will go over; that, however, may be uſed for purifying the ice vinegar from the adherent ſulphureous acid; when, after being diluted with water, it is ſaturated with barytes, filtrated, and evaporated to dryneſs. The reſiduum is ground to a fine powder, and together with charcoal powder, added to the ice vinegar; after which the mixture ought to be rectified over a gentle fire to the dryneſs of the reſiduum. Of 3lb. of acetite of kali, 22 oz. of ice vinegar were obtained by this new method. (*Crell's Chemical Annals*, 1800.)

On the internal uſe of Phoſphorus.— Prof. Brera relates a caſe, where two grains of phoſphorus triturated with ſweet oil and the yolk of an egg, and mixed with cinnamon water, brought on death, by cauſing burns in the inteſtinal canal, though they were only given by degrees, in the ſpace of two days; and beſides, an experiment with a dog of eight months, that was killed after five days, by four grains of phoſphorus triturated with gum arabic, and adminiſtered in four doſes in the courſe of one day. A ſimilar inſtance is mentioned by Dr. Kortum, of a man, who having ſuffered an apoplectic fit, retained a palſy of the left arm, and a weakneſs in the left foot, againſt which, all poſſible ſtimulants had been employed in vain. At laſt the doctor determined to try the phoſphorus, and two grains of it were accordingly triturated with gum arabic and ſweet almonds, and an emulſio phoſphorata prepared after the preſcription of Prof. Hufeland, conſiſting of ſeven ounces.

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Of this emulſion the patient was ordered to take only twice a day a table ſpoonful, in order to ſee whether his weak ſtomach could bear the remedy; but four days after, having hardly taken one half of the mixture, and conſequently only one grain of phoſphorus, the patient felt himſelf much heated, the pulſe became febrile, a congeſtion of blood towards the head aroſe; ſeveral bilious vomitings enſued, and the patient complained particularly of a diſagreeable tenſion and dryneſs in the breaſt. Cooling purgatives and an emulſion of ſweet almonds removed thoſe complaints in a few days, though the tenſion in the breaſt, with much coughing, remained a long time after, and the ſtomach became ſo weakened, that it required for ſeveral weeks the uſe of bitters before it was reſtored. It appears from theſe inſtances, how cautiouſly that powerful remedy muſt be uſed. (*Hufeland's Practical Journal.*)

For diſtinguiſhing the rheumatic head-ach from that which ariſes from crudities in the ſtomach, Dr. Dürr points out the following diagnoſtics: 1. The firſt remits ſometimes ſo much of its vehemence, that the patient remains free from it for ſeveral hours, whereas the other kind of head-ach continues with equal violence. 2. On moving the head the patient feels greater pains in the rheumatic head-ach. 3. This kind of head-ach is increaſed by cold, and the patients are therefore obliged to cover the head. 4. As ſoon as pains come on in other parts of the body, it begins to abate, and increaſes again when thoſe go off. 5. The leaſt motion of the head excites that head-ach again, after its having previouſly abated. 6. The rheumatic head-ach is limited to one part of the head, whereas that ariſing immediately from the ſtomach affects the whole head, or, at leaſt, the fore and back part of it. (*Ibid.*)

Dr. Corradori made ſome time ago the intereſting obſervation, that the *Tremella Noſtoc* had changed into three different plants, viz. *Tremella verrucoſa*, *Lichen faſcicularis*, and *rupeſtris*. He remarked afterwards, that it was likewiſe transformed into *Tremella lichenoides*, or Lichen tremelloides, *L.* though a part kept the form of *Noſtoc*. Growing upon moſſy ſlopes, it changed into *L. gelatinoſus*; upon ſtones or ſand into *L. criſpus*. On moiſt rocks, the *Tremella Noſtoc* was changed into a plant, coming near to *L. rupeſtris*. *Tremella verrucoſa* and *L. criſpus*, which are found on old walls, were metamorphoſed into *L. granuloſus*. Theſe curious changes are particularly favoured by wet and warm weather; but when the Tremella has reached a certain age, it remains conſtant; if it has once changed, this protheiform plant never recovers its former ſtate. Of Tremella, he gives the following definition, " A plaſtic vegetable ſubſtance, which is nouriſhed by intus-ſuſception." (*Annali di Chemica et Storia Naturale, T.* 17, 1798, No. 101.)

Dr. Corradori has communicated ſeveral intereſting obſervations on *glow worms*, and their difference with reſpect to their colour, and the number of ſhining rings. Several naturaliſts have at-

tempted

tempted to explain this phenomenon, amongst whom *Spalanzani* ascribed it to a slow combustion; but this Dr. Corradori denies, and rather thinks it owing to a dissipation of aggregated light, an opinion which seems to be confirmed by his experiments with worms put in oil, or boiling water. He proves it likewise by the experiments of *Becherheim*, who has shewn that these worms thrown into gases improper for combustion, continued to give light. Besides this, *Beccari*, *Brugnatelli*, and *Dufay* have demonstrated, that light is capable of combining and aggregating itself in bodies in more or less quantity, in proportion to their capacity of receiving it. He next proceeds to the question, whether these shining worms are chrysalides or female individuals of different winged insects, to which latter opinion, adopted by Linnæus, he is inclined to assent. According to which, *Lampyris splendidula* is a species of phosphoric insect, the female of which is not winged, and produces that light. The blackish glow-worm seems to be a different species of Lampyris, and not Italica, for which it was taken by Linnæus. (*Ibid.*)

The following is the arcanum against the tape worm, for which the late Mr. Mathieu, apothecary, at Berlin, received an annual pension from the present King of Prussia.

℞. *Limaturae stanni Angl. pur. unc. j. pulv. radic. filicis maris dr. vj. pulv. semin. Cynae unc. dimidiam, pulv. radic. Jalappae resinosae, Salis polychresti ana dr. j. Misc. fiat cum mellis communis sufficiente quantitate electuarium.*

℞. *Pulver. rad. Jalapp. resinos. Salis polychrest. ana scrupul.* xij. *Scammonei Aleppensis scrupul.* j. *Gummi guttae gran.* x. *Misce fiat cum melle communi electuarium.*

1. In employing this remedy, it is necessary for the patient to keep, several days before, a frugal diet, and not to eat any salt meat, &c. but only broth and vegetables. 2. For the cure, a tea spoonful of the electuary is taken every two hours, which must be continued for two or three days, till the patient feels a sensation of the worm in the bowels. 3. He is now to take of the purgative electuary, likewise every two hours, a tea spoonful, till the worm goes off. If this should not take place, some Castor oil may be given with it, or applied in clysters. 4. Age, sex, constitution of the patient, make an important difference in the application of this remedy, and its dose, and it is therefore proper to try it under the care of an experienced physician. Finally, it remains to be observed, that the efficacy of this remedy depends in a great measure on the root of the fern, and particular care ought therefore to be taken, to employ the root of polypodium filix mas, which, when reduced to powder, is of a reddish colour.—(*Salzburg Medical Chirurgical Gazette*, in German, No. 39.)

A certain Dr. Lehnhardt, invented some time ago a salutary liquor for pregnant women, which he sold as an arcanum, and recommended as an infallible remedy to prevent difficult labours.

It

It made a very great noife, and was highly praifed by the inventor, in the ftile of a quack; for which purpofe feveral letters, addreffed to the doctor and to the public, were publifhed in fundry German newfpapers, full of gratitude towards the inventor for his excellent remedy, and of praife of the liquor, as a moft important difcovery for the community. By the help of this liquor, women were faid to be fafely delivered, without the application of any inftrument, to which they had in former labours been obliged to have refort; and, according to the reports, which were loudly fpread, of the remedy, Juno Lucina ought to be in future reprefented with a bottle of Dr. Lehnhardt's liquor in her hand. It may be eafily imagined, how favourably fuch a beneficial remedy was received by the fair fex; and, on the other fide, how zealoufly the inventor was attacked by profeffional men.

Of this famous liquor, a chemical analyfis had already been made by a Mr. Thorey, who found it to confift of one ounce and $1\frac{1}{2}$ drachm of Epfom falt, (magnefia vitriolata) of $1\frac{1}{2}$ drachm of Tartarus vitriolatus, and of eight ounces of water. Prof. Manthey of Copenhagen, however, undertook, at the requeft of an eminent practitioner, a new analyfis of it, which is publifhed in Tromsdorf's Journal for Pharmacy, Vol. 8, No. 1, 1800, and differs in fome refpects from the former.—The liquor is fold in white fquare bottles fealed, with a ticket, on which is printed in German, "Dr. Lehnhardt's new invented falubrious liquor for pregnant women." The colour is of a beautiful dark red, like red French wine; the tafte, a faline bitter, but not very difagreeable; the fmell, a little vinous; and at the bottom of the bottle, a mucilaginous dark-coloured precipitation is generally found. The contents of one bottle weigh about 13 ounces $6\frac{1}{2}$ drachms. The refults of the analyfis were, that it confifts of a folution of Epfom and Glauber's falt, that no vitriolated tartar is contained in it, and but a little muriate of magnefia, which frequently is prefent in the Epfom falt; that the colouring parts were extracted by fpiritus vini. The fynthetical experiments confirmed this analyfis, and a proportionable folution of Sal mirabile Glauberi and Epfom falt in water, coloured with a vinous tincture of lignum fandalum, with the addition of fome red wine, exhibited a liquor, which in every refpect refembled that of Dr. Lehnhardt, or in the following prefcription. ℞. *Aquae fontanæ Unc.* vij. *Sal. mirabil. Glauber. Unc. j.* drachms v. *Sal. Epfomens. Unc.* j. *Vin. rubri Unc.* iv.—What efficacy is to be expected from this famous liquor, after the knowledge of its conftituent parts, may be eafily judged.

Prof. Abildgaard of Copenhagen, writes in a letter to Prof. Blumenbach, that they have made there many experiments, by injecting medicines into the veins of horfes, by which means, he affures him, he has cured difeafes that are deemed either incurable or very flowly to be cured, and particularly the ftaggers, within three or four days. They ufed for that purpofe an infufion of radix veratri albi, or the root of white hellebore, and it caufed vehement

vehement motions in the ſtomach and bowels. In cows alſo, where medicines brought immediately into the ſtomach are of little or no uſe, this remedy proved very ſerviceable, without producing any ill conſequences. An infuſion of ſix grains of arnica, occaſioned in a horſe a perfect lameneſs, which laſted ſeveral hours. (*Voigt's Magazine for Natural Science, etc. Vol. I. No.* 7, 1800, *in German.*)

A new edition of the three former works of Dr. JENNER on Cow-pox is in the preſs, to which will be added a fourth, with a plate exhibiting, by means of drawings coloured from Nature, the vaccine puſtule through its progreſſive ſtages of inflammation, veſication, and ſcabbing; the latter will alſo be printed ſeparately, for the conveniency of thoſe who poſſeſs the three former.

Dr. MOSSMAN begs leave to inform the Editors of the Medical and Phyſical Journal, that for ſome time paſt he has had many opportunities of inveſtigating the nature of *Idiopathic Fever*, and has devoted much time to an enquiry into the comparative excellence of the different modes of cure. He is extremely diſſatisfied with the curative agents hitherto employed; and is now preparing for the preſs, "A Diſſertation on *Febrile Action*, incluſive of Strictures on the general treatment of *Fevers*, and an exhibition of powers radically and ſpecifically ſubverſive of thoſe morbid phænomena."

Mr. JOHN PULLEY, of Bedford, Member of the Royal College of Surgeons in London, intends ſoon to publiſh an Eſſay on the proximate Cauſe of Animal Impregnation; being the ſubſtance of a Paper read and diſcuſſed in the Medical Society at Guy's Hoſpital, in October 1799.

The Inſtitution for the Inoculation of the Vaccine Pock is removed from Warwick-ſtreet to a large and more convenient houſe, No. 5, in Golden-ſquare. Subſcribers of One Guinea per annum, are entitled to have two patients conſtantly on the books. Further particulars may be had of the Secretary, at the Inſtitution.

TO CORRESPONDENTS.

Communications are received from Dr. Adams, Messrs. Headly, Edlin, Swift, Ring, M'Garth, and D. F.

ERRATA.

Page 267, line the laſt, for *conceiving*, read *censuring*.

Page 275, line 38, inſtead of *were* now *given over*, read *were given over*, &c.